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                  has been enhanced and reloaded
 NEWS  4  OCT 30  CHEMLIST enhanced with new search and display field
 NEWS  5  NOV 03  JAPIO enhanced with IPC 8 features and functionality
 NEWS  6  NOV 10  CA/CAplus F-Term thesaurus enhanced
 NEWS  7  NOV 10  STN Express with Discover! free maintenance release Version
                  8.01c now available
 NEWS  8  NOV 20  CA/CAplus to MARPAT accession number crossover limit increased
                  to 50,000
 NEWS  9  DEC 01  CAS REGISTRY updated with new ambiguity codes
 NEWS 10  DEC 11  CAS REGISTRY chemical nomenclature enhanced
 NEWS 11  DEC 14  WPIDS/WPINDEX/WPIX manual codes updated
 NEWS 12  DEC 14  GBFULL and FRFULL enhanced with IPC 8 features and
                  functionality
 NEWS 13  DEC 18  CA/CAplus pre-1967 chemical substance index entries enhanced
                  with preparation role
 NEWS 14  DEC 18  CA/CAplus patent kind codes updated
 NEWS 15  DEC 18  MARPAT to CA/CAplus accession number crossover limit increased
                  to 50,000
 NEWS 16  DEC 18  MEDLINE updated in preparation for 2007 reload
 NEWS 17  DEC 27  CA/CAplus enhanced with more pre-1907 records
 NEWS 18  JAN 08  CHEMLIST enhanced with New Zealand Inventory of Chemicals
 NEWS 19  JAN 16  CA/CAplus Company Name Thesaurus enhanced and reloaded
 NEWS 20  JAN 16  IPC version 2007.01 thesaurus available on STN
 NEWS 21  JAN 16  WPIDS/WPINDEX/WPIX enhanced with IPC 8 reclassification data
 NEWS 22  JAN 22  CA/CAplus updated with revised CAS roles
 NEWS 23  JAN 22  CA/CAplus enhanced with patent applications from India
 NEWS 24  JAN 29  PHAR reloaded with new search and display fields
 NEWS 25  JAN 29  CAS Registry Number crossover limit increased to 300,000 in
                  multiple databases
 NEWS 26  FEB 13  CASREACT coverage to be extended
 NEWS 27  Feb 15  PATDPASPC enhanced with Drug Approval numbers
 NEWS 28  Feb 15  RUSSIAPAT enhanced with pre-1994 records

 NEWS EXPRESS  NOVEMBER 10 CURRENT WINDOWS VERSION IS V8.01c, CURRENT
               MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),
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=> s vanstockum
L1             0 VANSTOCKUM

=> s vitiligo
L2          8691 VITILIGO

=> s l2 and folic and vitamin C and copper and (B12 or cobalamin)
L3            18 L2 AND FOLIC AND VITAMIN C AND COPPER AND (B12 OR COBALAMIN)

=> dupr rem l3
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=> dup rem l3
PROCESSING COMPLETED FOR L3
L4            17 DUP REM L3 (1 DUPLICATE REMOVED)

=> s l4 and zinc
L5            11 L4 AND ZINC

=> s l5 and pantothenic
L6             5 L5 AND PANTOTHENIC

=> d l6 1-5 ibib kwic
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L6 ANSWER 1 OF 5 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:722741 HCAPLUS Full-text
DOCUMENT NUMBER: 141:219003
TITLE: Method and composition for treating hypopigmentation of the hair and skin
INVENTOR(S): Vanstockum, Audrey
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 7 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2004170702	A1	20040902	US 2004-782827	20040223
WO 2004075849	A2	20040910	WO 2004-US5454	20040225
WO 2004075849	A3	20041202		
W: AE, AE, AG, AL, AL, AM, AM, AM, AT, AT, AU, AZ, AZ, BA, BB, BG, BG, BR, BR, BW, BY, BY, BZ, BZ, CA, CH, CN, CN, CO, CO, CR, CR, CU, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EC, EC, EE, EE, EG, ES, ES, FI, FI, GB, GD, GE, GE, GH, GM, HR, HR, HU, HU, ID, IL, IN, IS, JP, JP, KE, KE, KG, KG, KP, KP, KP, KR, KR, KZ, KZ, KZ, LC, LK, LR, LS, LS, LT, LU, LV, MA, MD, MD, MG, MK, MN, MW, MX, MX, MZ, MZ, NA, NI				
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
EP 1470822	A1	20041027	EP 2004-4336	20040226
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				

PRIORITY APPLN. INFO.: US 2003-449866P P 20030227

AB A method of treating disorders marked by a loss of pigmentation, comprising the step of administering vitamin B12, copper , folic acid, and vitamin C to a patient suffering from a loss of pigmentation. Addnl., an effective amount of both pantothenic acid and zinc may be administered to said patient. Cutaneous repigmentation can be accelerated by the optional addition of exposure to sunlight or UV light.

ST vitamin B12 sublingual copper folate mixt hair skin hypopigmentation; pantothenic acid zinc hydrochloride sunlight combination therapy skin depigmentation; UV radiation vitamin C topical shampoo hair skin hypopigmentation

IT Combination chemotherapy
Drug interactions
Human
Ovarian cycle
Sex
Shampoos
Solar UV radiation
UV radiation
Vitiligo
(method and composition for treating hypopigmentation of hair and skin)

IT 50-81-7, Vitamin C, biological studies 59-30-3, Folic acid, biological studies 68-19-9, Vitamin B12 79-83-4, Pantothenic acid 7440-50-8, Copper, biological studies 7440-66-6, Zinc, biological studies 7647-01-0, Hydrochloric acid, biological studies
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(method and composition for treating hypopigmentation of hair and skin)

L6 ANSWER 2 OF 5 USPATFULL on STN
ACCESSION NUMBER: 2007:29841 USPATFULL Full-text
TITLE: Nutritional supplements containing xanthone extracts
INVENTOR(S): Foulger, Sidney W., Potomac, MD, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2007026109	A1	20070201
APPLICATION INFO.:	US 2006-474087	A1	20060623 (11)

RELATED APPLN. INFO.: Continuation of Ser. No. US 2004-1650, filed on 1 Dec 2004, PENDING
DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: ALAN J. HOWARTH, P.O. BOX 1909, SANDY, UT, 84091-1909, US
NUMBER OF CLAIMS: 35
EXEMPLARY CLAIM: 1
LINE COUNT: 1886
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

SUMM . . . mixture of one or more organic-solvent-extracted xanthones and one or more vitamins selected from the group consisting of vitamin A, vitamin C, vitamin D, vitamin E, vitamin K, vitamin B-12, thiamine, riboflavin, niacin, pantothenic acid, pyridoxine, folic acid, biotin, derivatives thereof, and mixtures thereof. This nutritional supplement composition can also contain one or more minerals selected from the group consisting of calcium, magnesium, chromium, copper, iodine, iron, manganese molybdenum, selenium, zinc, boron, sodium, potassium, silicon, and mixtures thereof; one or more carotenoids selected from the group consisting of β-carotene, lutein, lycopene,. . .

SUMM . . . of one or more organic-solvent-extracted xanthones and one or more minerals selected from the group consisting of calcium, magnesium, chromium, copper, iodine, iron, manganese molybdenum, selenium, zinc, boron, sodium, potassium, silicon, and mixtures thereof.

SUMM . . . a mixture of about 1-200+10.sup.-3 parts by weight of one or more organic-solvent-extracted xanthones, about 100-3,000+10.sup.-3 parts by weight of vitamin C , about 10-800 international units of vitamin E, about 500-2,000+10.sup.-3 parts by weight of calcium, about 1-10+10.sup.-3 parts by weight of copper, about 1-40+10.sup.-3 parts by weight of iron, about 1-50+10.sup.-3 parts by weight of manganese, about 2-100+10.sup.-3 parts by weight of zinc, about 20-1,000+10.sup.-6 parts by weight of selenium, about 1-200+10.sup.-3 parts by weight of β-carotene, about 10-1,000+10.sup.-6 parts by weight of. .

SUMM (a) one or more vitamins selected from the group consisting of vitamin A, vitamin C, vitamin D, vitamin E, vitamin K, vitamin B-12, thiamine, riboflavin, niacin, pantothenic acid, pyridoxine, folic acid, biotin, derivatives thereof, and mixtures thereof; or

SUMM (b) one or more minerals selected from the group consisting of calcium, magnesium, chromium, copper, iodine, iron, manganese molybdenum, selenium, zinc, boron, sodium, potassium, silicon, and mixtures thereof; or

SUMM . . . a mixture of about 1-200+10.sup.-3 parts by weight of one or more organic-solvent-extracted xanthones, about 100-3,000+10.sup.-3 parts by weight of vitamin C , about 10-800 international units of vitamin E, about 500-2,000+10.sup.-3 parts by weight of calcium, about 1-10+10.sup.-3 parts by weight of copper, about 1-40+10.sup.-3 parts by weight of iron, about 1-50+10.sup.-3 parts by weight of manganese, about 2-100+10.sup.-3 parts by weight of zinc, about 20-1,000+10.sup.-6 parts by weight of selenium, about 1-200+10.sup.-3 parts by weight of β-carotene, about 10-1,000+10.sup.-6 parts by weight of. . .

DETD . . . an amount sufficient to prevent a deficiency thereof or to reduce the incidence of some cancers, i.e., lung (vitamin E, folic acid, vitamin D, selenium), prostate (vitamin E, vitamin D, selenium), stomach (vitamin C), colorectal (folic acid, vitamin D, selenium), skin (selenium), cervix (folic acid), and breast (vitamin D); osteoporosis (vitamin D, vitamin K, calcium, magnesium, vanadium, and possibly boron and copper); osteoarthritis (calcium); macular degeneration or cataracts (riboflavin, vitamin C, vitamin E, selenium); heart disease (vitamin E, folic acid, pyridoxine, vitamin A, magnesium, selenium, copper); neurologic disease (thiamine, niacin, pantothenic acid, folic acid, vitamin B-12); or Alzheimer's disease (vitamin E), or to aid in regeneration of connective tissue (vitamin C, copper, iron, manganese, zinc). An effective amount of a carotenoid is an amount sufficient to provide a beneficial effect, such as reduce the incidence. . .

DETD . . . of normal bone salts for the formation and growth of a sound bony structure. Certain vitamins, such as thiamine, riboflavin, pantothenic acid, and niacin, are known to be essential constituents of the respiratory enzymes that are required in the utilization of. . .

DETD Vitamin C, or ascorbic acid, is known to be essential for the formation of intercellular collagen. Symptoms of scurvy, due to vitamin C deficiency, include bleeding gums, easy bruising, and a tendency toward bone fractures. All these symptoms are a result of the requirement for vitamin C in the development of the ground substance between cells. This ground substance, primarily collagen, is the cement that gives our. . . points to the relationship of the vitamin in maintenance of tooth structures, matrix of bone, and the walls of capillaries. Vitamin C is essential for the healing of bone fractures. Such fractures heal slowly in a patient deficient in vitamin C. This is true also of wound healing.

DETD Vitamin C is also an antioxidant. Oxygen is a highly reactive element, and the process of reacting with certain chemicals is termed. . . free-radical damage appears to contribute to chronic conditions and the more antioxidant nutrition supplementation is realized to be is essential. Vitamin C is the most effective water-soluble antioxidant in human plasma. Vitamin C is also a requirement for the proper functioning of the immune system. It is involved in white blood cell production, T-cells, and macrophages. In addition, vitamin C is required in the synthesis of neurotransmitters, steroid hormones, and carnitine, and in the conversion of cholesterol to bile acids and for enhancing iron availability. Vitamin C prevents degenerative diseases, such as cataracts, certain cancers, and cardiovascular diseases. Further, vitamin C promotes healthy cell development, proper calcium absorption, and normal tissue growth and repair, such as in healing of wounds and bums. Still further, vitamin C assists in prevention of blood clotting and bruising, and it strengthens capillary walls. Moreover, it protects against infection and assists. . .

DETD . . . is also an essential component of enzymes and aids in the utilization of protein and certain other vitamins, such as folic acid, pantothenic acid, and vitamin B-12.

DETD Folic acid or folacin is one of the important hematopoietic agents necessary for proper regeneration of blood-forming elements and their functioning. That is, folic acid is essential for creating heme, the iron-containing substance in hemoglobin, which is crucial for oxygen transport in the body. Folic acid is also involved as a coenzyme in intermediary metabolic reactions in which one-carbon units are transferred. These reactions are. . . of purines and pyrimidines is ultimately linked with that of nucleotides and ribo-and deoxyribo-nucleic acids, finctional elements in all cells. Folic acid also assists in digestion, in proper functioning of the nervous system, and improving mental and emotional health. Folic acid may be effective in treating depression and anxiety. Folic acid is also very important in the development of the nervous system and of a developing fetus.

DETD Pantothenic acid is of the highest biological importance because of its incorporation into Coenzyme A (CoA), which is involved in many. . . and metabolism of fatty acids, and in the synthesis of such compounds as sterols and steroid hormones, porphyrins, and acetylcholine. Pantothenic acid also participates in the utilization of vitamins; improves the body's resistance to stress; helps in cell building and the development of the central nervous system; helps the adrenal glands, and fights infections by participating in building of antibodies. Pantothenic acid plays an important role in the secretion of hormones, such as cortisone, because of its role in supporting the. . . These hormones assist in metabolism, help fight allergies, and are beneficial in the maintenance of healthy skin, muscles, and nerves. Pantothenic acid is also used in the release of energy, as well as in the metabolism of fat, proteins, and carbohydrates.. . .

DETD . . . to facilitate reduction reactions and participate in the transfer of methyl groups. Its chief importance seems to be, together with folic acid, in the anabolism of DNA in all cells. It is a requisite for normal blood formation, and certain macrocystic. . .

DETD . . . been difficult to identify choline-deficiency syndromes in humans. The Institute of Medicine noted: "Healthy males with normal folate and vitamin B12 status fed a choline deficient diet have diminished plasma choline and phosphatidylcholine concentrations, and develop liver damage. For these humans,. . .

DETD . . . it is actually a nutritional ingredient as well. Since it is a moiety of pteroylglutamic acid (PGA), a form of folic acid, some health professionals do not consider it a vitamin, but only a B-complex factor.

DETD . . . such, it aids in the utilization of amino acids, supports red blood cell formation, and assists in the manufacture of folic acid in the intestines. It has been linked to hair growth, as well as reversing the graying of hair, but these results are disappointing. People suffering from vitiligo, over-pigmentation of skin, or without pigment in some spots, have reported an improvement of the skin after more PABA was. . .

DETD . . . levels of PABA are stored in the body and may cause liver damage. PABA is best used in combination with vitamin C and the B group vitamins, particularly folic acid.

Long term antibiotic use may require more PABA from the body, but PABA affects the effectiveness of sulfa drugs.. . .

DETD . . . (B-1) 1-50 + 10.sup.-3 5-30 + 10.sup.-3

Riboflavin (B-2) 1-40 + 10.sup.-3 2-20 + 10.sup.-3

Niacin/Niacinamide (B-3) 0.5-150 + 10.sup.-3 10-150 + 10.sup.-3

Pantothenic Acid (B-5) 1-100 + 10.sup.-3 5-50 + 10.sup.-3

Pyridoxine (B-6) 1-100 + 10.sup.-3 1-50 + 10.sup.-3

Folate 100-3,000 + 10.sup.-6 200-2,000 +. .

.

DETD . . . sulphur, and chloride) are present in the body in quantities of more than five grams. Trace elements, which include boron, copper, iron, manganese, selenium, and zinc are found in the body in quantities of less than five grams.

DETD Copper is another important trace element in the diet. The most common defect observed in copper-deficient animals is anemia. Other abnormalities include growth depression, skeletal defects, demyelination and degeneration of the nervous system, ataxia, defects in pigmentation and structure of hair or wool, reproductive failure, and cardiovascular lesions, including dissecting aneurisms. Several copper-containing metalloproteins have been isolated, including tyrosinase, ascorbic acid oxidase, laccase, cytochrome oxidase, uricase, monoamine oxidase, δ-aminolevulinic acid hydrydase, and dopamine-β-hydroxylase. Copper functions in the absorption and utilization of iron, electron transport, connective tissue metabolism, phospholipid formation, purine metabolism, and development of the nervous system. Ferroxidase I (ceruloplasmin), a copper-containing enzyme, effects the oxidation of Fe(II) to Fe(III), a required step for mobilization of stored iron. A copper-containing enzyme is thought to be responsible for the oxidative deamination of the epsilon amino group of lysine to produce desmosine and isodesmosine, the cross-links of elastin. In copper-deficient animals the arterial elastin is weaker and dissecting aneurisms may occur. Copper is required in the formation of hemoglobin, red blood cells, and bones, while it helps with the formation of elastin and collagen, thus making it necessary for wound healing. Copper is also a constituent of superoxide dismutase (SOD), a powerful enzyme that scavenges free radicals in cells.

DETD . . . lipids, and proteins, as well as in the synthesis of glucose and lipids. Manganese also enables the body to utilize vitamin C, vitamin B-1, and biotin, as well as choline. Manganese is used in the manufacture of fat, sex hormones, and breast. . .

DETD Zinc is known to occur in many important metalloenzymes. These include carbonic anhydrase, carboxypeptidases A and B, alcohol dehydrogenase, glutamic dehydrogenase,. . . D-glyceraldehyde-3-phosphate dehydrogenase, lactic dehydrogenase, malic dehydrogenase, alkaline phosphatase, and aldolase. Impaired synthesis of nucleic acids and proteins.has been observed in zinc deficiency. There is also evidence that zinc may be involved in the secretion of insulin and in the function of the hormone. Zinc is also necessary for a healthy immune system and is useful for treating skin conditions, such as acne and boils, and for treating sore throats. Zinc is also needed for cell division and for growth and maintenance of muscles. Children need zinc in the diet for normal growth and sexual development. Zinc is also a constituent of superoxide dismutase (ZnSOD), which scavenges free radicals. Further, zinc is required for growth and maintenance of hair, nails, and skin.

DETD . . . + 10.sup.-3 500-1,500 + 10.sup.-3

Magnesium 50-1,000 + 10.sup.-3 100-800 + 10.sup.-3

Chromium 10-500 + 10.sup.-6 10-300 + 10.sup.-6

Copper 1-10 + 10.sup.-3 1-5 + 10.sup.-3

Iodine 10-500 + 10.sup.-6 10-300 + 10.sup.-6

Iron 1-40 + 10.sup.-3 5-20 + 10.sup.-3

. . . 1-50 + 10.sup.-3 2-25 + 10.sup.-3

Molybdenum 5-200 + 10.sup.-6 10-100 + 10.sup.-6

Selenium 20-1,000 + 10.sup.-6 20-500 + 10.sup.-6

Zinc 2-100 + 10.sup.-3 5-40 + 10.sup.-3

Boron 100-1,000 + 10.sup.-6 200-800 + 10.sup.-6

Sodium 100-500 + 10.sup.-3 200-400 + 10.sup.-3

. . .

DETD . . . art. U.S. Pat. No. 5,292,538. Examples of minerals that can be provided as amino acid chelates include calcium, magnesium, manganese, zinc, iron, boron, copper, molybdenum, chromium, and silicon. Still further, minerals can be provided as organic compounds, such as ascorbates, citrates, picolinates, aspartates, carbonates,. . . Illustrative examples of various mineral forms according to the present invention include potassium bicarbonate, sodium bicarbonate, calcium carbonate, calcium ascorbate, zinc picolinate, manganese picolinate, copper aspartate, molybdenum trioxide, chromium picolinate, potassium iodide, boron citrate, silicon amino acid chelate, and the like.

DETD . . . free radicals and are believed to reduce the risk of cancer and heart disease, decrease allergy and arthritis symptoms, promote vitamin C activity, improve the strength of blood vessels, block the progression of cataracts and macular degeneration, treat menopausal hot flashes, and. . .

DETD . . . with the intake of very high dosage of inositol. Inositol is best used with choline, B group vitamins, vitamin E, vitamin C, and linoleic acid.

DETD . . . less joint deterioration. MSM is a non-metallic organic compound that plays an essential role in human nutrition. When amino acids, zinc, copper, silicon, and vitamin C are present, the body metabolizes MSM to sulfur. Sulfur, a structural component integral to new cell growth, is stored in. . .

DETD . . . 50 800 400

Vitamin E (IU) 200 500 800 750 200 400 150 300 800

Vitamin K (μg) 80 200 200 20 80

Vitamin C (mg) 200 1000 800 2000 1000 600 1800 900 800

Thiamine (mg) 10 40 5 50 10

Riboflavin (mg) 8 20 4. . . 80 50

Folate (μg) 800 1200 2600 200 800

Vitamin B-12 (μg) 60 100 150 5 60

Biotin (μg) 300 200 50 1000 300

Pantothenic Acid (mg) 15 20 5 75 15

Choline (mg) 100 80 40 200

100

Calcium (mg)	600	1500	800	1200	1000	600	1500	1000
800								
Magnesium (mg)			200		100		50	1000
200								
Chromium (µg)			250		400		25	350
250								
Copper (mg)	1	10	2	4	2		10	
2 2								
Iodine (µg)			100		50		200	20
100								
Iron (mg)	5	40	20	10. . .	50	4	2	40
5								
Molybdenum (µg)			30		40		5	100
30								
Selenium (µg)	100	500	250	200	50	300	50	800
250								
Zinc (mg)	10	80	20	40	100	15	100	
10 20								
Boron (µg)			500		100		800	300
500								
Potassium (mg)			250		100		50. . .	

CLM What is claimed is:

. . . (a) one or more organic-solvent-extracted xanthones; and (b) one or more vitamins selected from the group consisting of vitamin A, vitamin C, vitamin D, vitamin E, vitamin K, vitamin B-12, thiamine, riboflavin, niacin, pantothenic acid, pyridoxine, folic acid, biotin, derivatives thereof, and mixtures thereof.

. . . composition of claim 1 further consisting of one or more minerals selected from the group consisting of calcium, magnesium, chromium, copper, iodine, iron, manganese, molybdenum, selenium, zinc, boron, sodium, potassium, silicon, and mixtures thereof.

. . . one or more organic-solvent-extracted xanthones; and (b) one or more minerals selected from the group consisting of calcium, magnesium, chromium, copper, iodine, iron, manganese, molybdenum, selenium, zinc, boron, sodium, potassium, silicon, and mixtures thereof.

. . . a mixture of about 1-200+10.sup.-3 parts by weight of one or more organic-solvent-extracted xanthones, about 100-3,000+10.sup.-3 parts by weight of vitamin C, about 10-800 international units of vitamin E, about 500-2,000+10.sup.-3 parts by weight of calcium, about 1-10+10.sup.-3 parts by weight of copper, about 1-40+10.sup.-3 parts by weight of iron, about 1-50+10.sup.-3 parts by weight of manganese, about 2-100+10.sup.-3 parts by weight of zinc, about 20-1,000+10.sup.-6 parts by weight of selenium, about 1-200+10.sup.-3 parts by weight of β-carotene, about 10-1,000+10.sup.-6 parts by weight of. . .

. . . of riboflavin, about 0.5-150+10.sup.-3 parts by weight of niacin or niacinamide or a mixture thereof, 1-100+10.sup.-3 parts by weight of pantothenic acid, about 1-100+10.sup.-3 parts by weight of pyridoxine, about 100-3,000+10.sup.-6 parts by weight of folic acid, about 2-160+10.sup.-6 parts by weight of vitamin B-12, about 50-5,000+10.sup.-6 parts by weight of biotin, about 25-600+10.sup.-3 parts by. . .

. . . a mixture of about 1-200+10.sup.-3 parts by weight of one or more extracted xanthones, about 100-3,000+10.sup.-3 parts by weight of vitamin C, about 10-800 international units of vitamin E, about 1,000-10,000 international units of vitamin A, about 50-1,000 international units of vitamin. . . of riboflavin, about 0.5-150+10.sup.-3 parts by weight of niacin or niacinamide or a mixture thereof, 1-100+10.sup.-3 parts by weight of pantothenic acid, about 1-100+10.sup.-3 parts by weight of pyridoxine, about 100-3,000+10.sup.-6 parts by weight of folic acid, about 2-160+10.sup.-6 parts by weight of vitamin B-12, about 50-5,000+10.sup.-6 parts by weight of biotin, about 25-600+10.sup.-3 parts by. . . 1-100+10.sup.-3 parts by weight of para-aminobenzoic acid, about 500-2,000+10.sup.-3 parts by weight of calcium, about 1-10+10.sup.-3 parts by weight of copper, about 1-40+10.sup.-3 parts by weight of iron, about 1-50+10.sup.-3 parts by weight of manganese, about 2-100+10.sup.-3 parts by weight of zinc, about 20-1,000+10.sup.-6 parts by weight of selenium, about 50-1,000+10.sup.-3 parts by weight of magnesium, about 10-500+10.sup.-6 parts by weight of. . .

. . . of one or more organic-solvent-extracted xanthones and (a) one or more vitamins selected from the group consisting of vitamin A, vitamin C, vitamin D, vitamin E, vitamin K, vitamin B-12, thiamine, riboflavin, niacin, pantothenic acid, pyridoxine, folic acid, biotin, derivatives thereof, and mixtures thereof; or (b) one or more minerals selected from the group consisting of calcium, magnesium, chromium, copper, iodine, iron, manganese, molybdenum, selenium, zinc, boron, sodium, potassium, silicon, and mixtures thereof; or (c) one or more carotenoids selected from the group consisting of β-carotene,. . .

. . . a mixture of about 1-200+10.sup.-3 parts by weight of one or more extracted xanthones, about 100-3,000+10.sup.-3 parts by weight of vitamin C, about 10-800 international units of vitamin E, about 500-2,000+10.sup.-3 parts by weight of calcium, about 1-10+10.sup.-3 parts by weight of copper, about 1-40+10.sup.-3 parts by weight of iron, about 1-50+10.sup.-3 parts by weight of manganese, about 2-100+10.sup.-3 parts by weight of zinc, about 20-1,000+10.sup.-6 parts by weight of selenium, about 1-200+10.sup.-3 parts by weight of β-carotene, about 10-1,000+10.sup.-6 parts by weight of. . .

. . . of riboflavin, about 0.5-150+10.sup.-3 parts by weight of niacin or niacinamide or a mixture thereof, 1-100+10.sup.-3 parts by weight of pantothenic acid, about 1-100+10.sup.-3 parts by weight of pyridoxine, about 100-3,000+10.sup.-6 parts by weight of folic acid, about 2-160+10.sup.-6 parts by weight of vitamin B-12, and about 50-5,000+10.sup.-6 parts by weight of biotin.

L6 ANSWER 3 OF 5 USPATFULL on STN

ACCESSION NUMBER: 2006:248357 USPATFULL Full-text

TITLE: Use of phenylmethimazoles, methimazole derivatives, and tautomeric cyclic thiones for the treatment of autoimmune/inflammatory diseases associated with toll-like receptor overexpression

INVENTOR(S): Kohn, Leonard D., Athens, OH, UNITED STATES
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	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2006211752	A1	20060921
APPLICATION INFO.:	US 2005-130922	A1	20050517 (11)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 2004-912948, filed on 6 Aug 2004, PENDING Continuation-in-part of Ser. No. US 2004-801986, filed on 16 Mar 2004, PENDING
DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: FROST BROWN TODD, LLC, 2200 PNC CENTER, 201 E. FIFTH STREET, CINCINNATI, OH, 45202, US
NUMBER OF CLAIMS: 167
EXEMPLARY CLAIM: 1-138
NUMBER OF DRAWINGS: 17 Drawing Page(s)
LINE COUNT: 8384
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

SUMM . . . Rheumatic Fever, Rheumatoid Arthritis, Sarcoidosis, Scleroderma, Sjogren's Syndrome, Stiffman Syndrome, Takayasu Arteritis, Temporal Arteritis/Giant Cell Arteritis, Ulcerative Colitis, Uveitis, Vasculitis, Vitiligo, Wegener's Granulomatosis, or myasthenia gravis.

SUMM . . . alpha/gamma agonists, vitamin B6 (also known as pyridoxine) and the pharmaceutically acceptable salts thereof such as the HCl salt; vitamin B12 (also known as cyanocobalamin); folic acid or a pharmaceutically acceptable salt or ester thereof such as the sodium salt and the methylglucamine salt; anti-oxidant vitamins such as vitamin C and E and beta carotene; beta-blockers; angiotensin II antagonists such as losartan; angiotensin converting enzyme inhibitors such as enalapril and. . .

DETD . . . acids including inorganic or organic bases and inorganic or organic acids. Salts derived from inorganic bases include: aluminum, ammonium, calcium, copper, ferric, ferrous, lithium, magnesium, manganic salts, manganous, potassium, sodium, zinc, and the like. Particularly preferred are the ammonium, calcium, magnesium, potassium, and sodium salts. Salts derived from pharmaceutically acceptable organic. . . acetic, benzenesulfonic, benzoic, camphorsulfonic, citric, ethanesulfonic, fumaric, gluconic, glutamic, hydrobromic, hydrochloric, isethionic, lactic, maleic, malic, mandelic, methanesulfonic, mucic, nitric, pamoic, pantothenic, phosphoric, succinic, sulfuric, tartaric, p-toluenesulfonic acid, and the like. Particularly preferred are citric, hydrobromic, hydrochloric, maleic, phosphoric, sulfuric, and tartaric. . .

DETD Elevated serum levels of homocysteine are highly correlated with atherosclerosis, heart disease, stroke, and peripheral vascular disease. Vitamin B6, vitamin B12, and folic acid act to lower homocysteine levels and reduce the incidence of these disease states. Vitamin B6 may be included in amounts between about 2.mg and 2 grams. Vitamin B12 may be included in amounts between about 3 μg and 2 mg. Folic acid may generally be included in amounts up to about 5 mg, such as about 400 to 800 g, about. . .

CLM What is claimed is:
. . . Rheumatic Fever, Rheumatoid Arthritis, Sarcoidosis, Scleroderma, Sjogren's Syndrome, Stiffinan Syndrome, Iakayasu Arteritis, Temporal Arteritis/Giant Cell Arteritis, Ulcerative Colitis, Uveitis, Vasculitis, Vitiligo, Wegener's Granulomatosis, or myasthenia gravis.

. . . dual agonists, vitamin B6 (also known as pyridoxine) and the pharmaceutically acceptable salts thereof such as the HCl salt; vitamin B12 (also known as cyanocobalamin); folic acid or a pharmaceutically acceptable salt or ester thereof such as the sodium salt and the methylglucamine salt; anti-oxidant vitamins such as vitamin C and E and beta carotene; beta-blockers; angiotensin II antagonists such as losartan; angiotensin converting enzyme inhibitors such as enalapril and. . .

L6 ANSWER 4 OF 5 USPATFULL on STN
ACCESSION NUMBER: 2006:136978 USPATFULL Full-text
TITLE: Nutritional supplement drink containing xanthone extracts
INVENTOR(S): Foulger, Sidney W., Potomac, MD, UNITED STATES
Wu, Yue Xuan, Rockville, MD, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2006115556	A1	20060601
APPLICATION INFO.:	US 2005-129560	A1	20050512 (11)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 2004-1650, filed on 1 Dec 2004, PENDING
DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: ALAN J. HOWARTH, P.O. BOX 1909, SANDY, UT, 84091-1909, US
NUMBER OF CLAIMS: 28
EXEMPLARY CLAIM: 1
LINE COUNT: 1932
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

SUMM . . . a mixture of one or more organic-solvent-extracted xanthones; one or more vitamins selected from the group consisting of vitamin A, vitamin C, vitamin D, vitamin E, vitamin K, vitamin B-12, thiamine, riboflavin, niacin, pantothenic acid, pyridoxine, folic acid, biotin, derivatives thereof, and mixtures thereof; a flavoring agent; and an aqueous carrier. This nutritional supplement composition can also contain one or more minerals selected from the group consisting of calcium, magnesium, chromium, copper, iodine, iron, manganese molybdenum, selenium, zinc, boron, sodium, potassium, silicon, and mixtures thereof; one or more carotenoids selected from the group consisting of β-carotene, lutein, lycopene,. . .

SUMM . . . mixture of one or more organic-solvent-extracted xanthones; one or more minerals selected from the group consisting of calcium, magnesium, chromium, copper, iodine, iron, manganese molybdenum, selenium, zinc, boron, sodium, potassium, silicon, and mixtures thereof; a flavoring agent; and an aqueous carrier.

SUMM . . . a mixture of about 1-200+10.sup.-3 parts by weight of one or more organic-solvent-extracted xanthones, about 100-3,000+10.sup.-3 parts by weight of vitamin C , about 10-800 international units of vitamin E, about 500-2,000+10.sup.-3 parts by weight of calcium, about 1-10+10.sup.-3 parts by weight of copper, about 1-40+10.sup.-3 parts by weight of iron, about 1-50+10.sup.-3 parts by weight of manganese, about 2-100+10.sup.-3 parts by weight of zinc, about 20-1,000+10.sup.-6 parts by weight of selenium, about 1-200+10.sup.-3 parts by weight of P-carotene,

about 10-1,000+10.sup.-6 parts by weight of. . .

SUMM . . . a flavoring agent, an aqueous carrier, and (a) one or more vitamins selected from the group consisting of vitamin A, vitamin C, vitamin D, vitamin E, vitamin K, vitamin B-12, thiamine, riboflavin, niacin, pantothenic acid, pyridoxine, folic acid, biotin, derivatives thereof, and mixtures thereof; or

SUMM (b) one or more minerals selected from the group consisting of calcium, magnesium, chromium, copper, iodine, iron, manganese molybdenum, selenium, zinc, boron, sodium, potassium, silicon, and mixtures thereof; or

SUMM . . . a mixture of about 1-200+10.sup.-3 parts by weight of one or more organic-solvent-extracted xanthones, about 100-3,000+10.sup.-3 parts by weight of vitamin C , about 10-800 international units of vitamin E, about 500-2,000+10.sup.-3 parts by weight of calcium, about 1-10+10.sup.-3 parts by weight of copper, about 1-40+10.sup.-3 parts by weight of iron, about 1-50+10.sup.-3 parts by weight of manganese, about 2-100+10.sup.-3 parts by weight of zinc, about 20-1,000+1o.sup.-6 parts by weight of selenium, about 1-200+10.sup.-3 parts by weight of β-carotene, about 10-1,000+10.sup.-6 parts by weight of. . .

DETD . . . an amount sufficient to prevent a deficiency thereof or to reduce the incidence of some cancers, i.e., lung (vitamin E, folic acid, vitamin D, selenium), prostate (vitamin E, vitamin D, selenium), stomach (vitamin C), colorectal (folic acid, vitamin D, selenium), skin (selenium), cervix (folic acid), and breast (vitamin D); osteoporosis (vitamin D, vitamin K, calcium, magnesium, vanadium, and possibly boron and copper); osteoarthritis (calcium); macular degeneration or cataracts (riboflavin, vitamin C, vitamin E, selenium); heart disease (vitamin E, folic acid, pyridoxine, vitamin A, magnesium, selenium, copper); neurologic disease (thiamine, niacin, pantothenic acid, folic acid, vitamin B-12); or Alzheimer's disease (vitamin E), or to aid in regeneration of connective tissue (vitamin C, copper, iron, manganese, zinc). An effective amount of a carotenoid is an amount sufficient to provide a beneficial effect, such as reduce the incidence. . .

DETD . . . of normal bone salts for the formation and growth of a sound bony structure. Certain vitamins, such as thiamine, riboflavin, pantothenic acid, and niacin, are known to be essential constituents of the respiratory enzymes that are required in the utilization of. . .

DETD Vitamin C, or ascorbic acid, is known to be essential for the formation of intercellular collagen. Symptoms of scurvy, due to vitamin C deficiency, include bleeding gums, easy bruising, and a tendency toward bone fractures. All these symptoms are a result of the requirement for vitamin C in the development of the ground substance between cells. This ground substance, primarily collagen, is the cement that gives our. . . points to the relationship of the vitamin in maintenance of tooth structures, matrix of bone, and the walls of capillaries. Vitamin C is essential for the healing of bone fractures. Such fractures heal slowly in a patient deficient in vitamin C. This is true also of wound healing.

DETD Vitamin C is also an antioxidant. Oxygen is a highly reactive element, and the process of reacting with certain chemicals is termed. . . free-radical damage appears to contribute to chronic conditions and the more antioxidant nutrition supplementation is realized to be is essential. Vitamin C is the most effective water-soluble antioxidant in human plasma. Vitamin C is also a requirement for the proper functioning of the immune system. It is involved in white blood cell production, T-cells, and macrophages. In addition, vitamin C is required in the synthesis of neurotransmitters, steroid hormones, and carnitine, and in the conversion of cholesterol to bile acids and for enhancing iron availability. Vitamin C prevents degenerative diseases, such as cataracts, certain cancers, and cardiovascular diseases. Further, vitamin C promotes healthy cell development, proper calcium absorption, and normal tissue growth and repair, such as in healing of wounds and burns. Still further, vitamin C assists in prevention of blood clotting and bruising, and it strengthens capillary walls. Moreover, it protects against infection and assists. . .

DETD . . . is also an essential component of enzymes and aids in the utilization of protein and certain other vitamins, such as folic acid, pantothenic acid, and vitamin B-12.

DETD Folic acid or folacin is one of the important hematopoietic agents necessary for proper regeneration of blood-forming elements and their functioning. That is, folic acid is essential for creating heme, the iron-containing substance in hemoglobin, which is crucial for oxygen transport in the body. Folic acid is also involved as a coenzyme in intermediary metabolic reactions in which one-carbon units are transferred. These reactions are. . . purines and pyrimidines is ultimately linked with that of nucleotides and ribo- and deoxyribo-nucleic acids, functional elements in all cells. Folic acid also assists in digestion, in proper functioning of the nervous system, and improving mental and emotional health. Folic acid may be effective in treating depression and anxiety. Folic acid is also very important in the development of the nervous system and of a developing fetus.

DETD Pantothenic acid is of the highest biological importance because of its incorporation into Coenzyme A (CoA), which is involved in many. . . and metabolism of fatty acids, and in the synthesis of such compounds as sterols and steroid hormones, porphyrins, and acetylcholine. Pantothenic acid also participates in the utilization of vitamins; improves the body's resistance to stress; helps in cell building and the development of the central nervous system; helps the adrenal glands, and fights infections by participating in building of antibodies. Pantothenic acid plays an important role in the secretion of hormones, such as cortisone, because of its role in supporting the. . . These hormones assist in metabolism, help fight allergies, and are beneficial in the maintenance of healthy skin, muscles, and nerves. Pantothenic acid is also used in the release of energy, as well as in the metabolism of fat, proteins, and carbohydrates.. . .

DETD . . . to facilitate reduction reactions and participate in the transfer of methyl groups. Its chief importance seems to be, together with folic acid, in the anabolism of DNA in all cells. It is a requisite for normal blood formation, and certain macrocystic. . .

DETD . . . been difficult to identify choline-deficiency syndromes in humans. The Institute of Medicine noted: "Healthy males with normal folate and vitamin B12 status fed a choline deficient diet have diminished plasma choline and phosphatidylcholine concentrations, and develop liver damage. For these humans,. . .

DETD . . . it is actually a nutritional ingredient as well. Since it is a moiety of pteroylglutamic acid (PGA), a form of folic acid, some health professionals do not consider it a vitamin, but only a

B-complex factor.

DETD . . . such, it aids in the utilization of amino acids, supports red blood cell formation, and assists in the manufacture of folic acid in the intestines. It has been linked to hair growth, as well as reversing the graying of hair, but these results are disappointing. People suffering from vitiligo, over-pigmentation of skin, or without pigment in some spots, have reported an improvement of the skin after more PABA was. . .

DETD . . . levels of PABA are stored in the body and may cause liver damage. PABA is best used in combination with vitamin C and the B group vitamins, particularly folic acid. Long term antibiotic use may require more PABA from the body, but PABA affects the effectiveness of sulfa drugs.. . .

DETD . . . (B-1) 1-50 + 10.sup.-3 5-30 + 10.sup.-3

Riboflavin (B-2)	1-40 + 10.sup.-3	2-20 + 10.sup.-3
Niacin/Niacinamide (B-3)	0.5-150 + 10.sup.-3	10-150 + 10.sup.-3
Pantothenic Acid (B-5)	1-100 + 10.sup.-3	5-50 + 10.sup.-3
Pyridoxine (B-6)	1-100 + 10.sup.-3	1-50 + 10.sup.-3
Folate	100-3,000 + 10.sup.-6	200-2,000 +. . .

DETD . . . sulphur, and chloride) are present in the body in quantities of more than five grams. Trace elements, which include boron, copper, iron, manganese, selenium, and zinc are found in the body in quantities of less than five grams.

DETD Copper is another important trace element in the diet. The most common defect observed in copper-deficient animals is anemia. Other abnormalities include growth depression, skeletal defects, demyelination and degeneration of the nervous system, ataxia, defects in pigmentation and structure of hair or wool, reproductive failure, and cardiovascular lesions, including dissecting aneurisms. Several copper-containing metalloproteins have been isolated, including tyrosinase, ascorbic acid oxidase, laccase, cytochrome oxidase, uricase, monoamine oxidase, δ-aminolevulinic acid hydrydase, and dopamine-β-hydroxylase. Copper functions in the absorption and utilization of iron, electron transport, connective tissue metabolism, phospholipid formation, purine metabolism, and development of the nervous system. Ferroxidase I (ceruloplasmin), a copper-containing enzyme, effects the oxidation of Fe(II) to Fe(III), a required step for mobilization of stored iron. A copper-containing enzyme is thought to be responsible for the oxidative deamination of the epsilon amino group of lysine to produce desmosine and isodesmosine, the cross-links of elastin. In copper-deficient animals the arterial elastin is weaker and dissecting aneurisms may occur. Copper is required in the formation of hemoglobin, red blood cells, and bones, while it helps with the formation of elastin and collagen, thus making it necessary for wound healing. Copper is also a constituent of superoxide dismutase (SOD), a powerful enzyme that scavenges free radicals in cells.

DETD . . . lipids, and proteins, as well as in the synthesis of glucose and lipids. Manganese also enables the body to utilize vitamin C, vitamin B-1, and biotin, as well as choline. Manganese is used in the manufacture of fat, sex hormones, and breast. . .

DETD Zinc is known to occur in many important metalloenzymes. These include carbonic anhydrase, carboxypeptidases A and B, alcohol dehydrogenase, glutamic dehydrogenase,. . . dehydrogenase, lactic dehydrogenase, malic dehydrogenase, alkaline phosphatase, and aldolase. Impaired synthesis of nucleic acids and proteins has been observed in zinc deficiency. There is also evidence that zinc may be involved in the secretion of insulin and in the function of the hormone. Zinc is also necessary for a healthy immune system and is useful for treating skin conditions, such as acne and boils, and for treating sore throats. Zinc is also needed for cell division and for growth and maintenance of muscles. Children need zinc in the diet for normal growth and sexual development. Zinc is also a constituent of superoxide dismutase (ZnSOD), which scavenges free radicals. Further, zinc is required for growth and maintenance of hair, nails, and skin.

DETD . . . 500-2,000 + 10.sup.-3 500-1,500 + 10.sup.-3

Magnesium	50-1,000 + 10.sup.-3 100-800 + 10.sup.-3
Chromium	10-500 + 10.sup.-6 10-300 + 10.sup.-6
Copper	1-10 + 10.sup.-3 1-5 + 10.sup.-3
Iodine	10-500 + 10.sup.-6 10-300 + 10.sup.-6
Iron	1-40 + 10.sup.-3 5-20 + 10.sup.-3
. . .	1-50 + 10.sup.-3 2-25 + 10.sup.-3
Molybdenum	5-200 + 10.sup.-6 10-100 + 10.sup.-6
Selenium	20-1,000 + 10.sup.-6 20-500 + 10.sup.-6
Zinc	2-100 + 10.sup.-3 5-40 + 10.sup.-3
Boron	100-1,000 + 10.sup.-6 200-800 + 10.sup.-6
Sodium	100-500 + 10.sup.-3 200-400 + 10.sup.-3

. . .

DETD . . . the art. U.S. Pat. No.5,292,538. Examples of minerals that can be provided as amino acid chelates include calcium, magnesium, manganese, zinc, iron, boron, copper, molybdenum, chromium, and silicon. Still further, minerals can be provided as organic compounds, such as ascorbates, citrates, picolinates, aspartates, carbonates,. . . Illustrative examples of various mineral forms according to the present invention include potassium bicarbonate, sodium bicarbonate, calcium carbonate, calcium ascorbate, zinc picolinate, manganese picolinate, copper aspartate, molybdenum trioxide, chromium picolinate, potassium iodide, boron citrate, silicon amino acid chelate, and the like.

DETD . . . free radicals and are believed to reduce the risk of cancer and heart disease, decrease allergy and arthritis symptoms, promote vitamin C activity, improve the strength of blood vessels, block the progression of cataracts and macular degeneration, treat menopausal hot flashes, and. . .

DETD . . . with the intake of very high dosage of inositol. Inositol is best used with choline, B group vitamins, vitamin E, vitamin C, and linoleic acid.

DETD . . . less joint deterioration. MSM is a non-metallic organic compound that plays an essential role in human nutrition. When amino acids, zinc, copper, silicon, and vitamin C are present, the body metabolizes MSM to sulfur. Sulfur, a structural component integral to new cell growth, is stored in. . .

DETD . . . 50 800 400

Vitamin E (IU)	200	500	800	750	200	400	150	300	800		
Vitamin K (μg)	80	200	200	20	80						
Vitamin C (mg)	200	1000	800	2000	1000	600	1800	900	800		
Thiamine (mg)	10	40	5	50	10						

Riboflavin (mg)	8	20			4. . .	80	50	
Folate (µg)	800	1200			2600	200	800	
Vitamin B-12 (µg)	60	100			150	5	60	
Biotin (µg)	300	200			50	1000	300	
Pantothenic Acid (mg)	15	20			5		75	15
Choline (mg)	100	80			40	200	100	
Calcium (mg)	600	1500	800	1200	1000	600	1500	1000
Magnesium (mg)	200	100			50	1000	200	
Chromium (µg)	250	400			25	350	250	
Copper (mg)	1	10	2	4	2	10	2	2
Iodine (µg)	100	50			200	20	100	
Iron (mg)	5	40	20	10. . .	50	4	2	40
Molybdenum (µg)	30	40			5	100	30	
Selenium (µg)	100	500	250	200	50	300	50	800
Zinc (mg)	10	80	20	40	100	15	100	10 20
Boron (µg)	500	100			800	300	500	
Potassium (mg)	250	100			50. . .			

CLM What is claimed is:

. . . a mixture of one or more organic-solvent-extracted xanthones; one or more vitamins selected from the group consisting of vitamin A, vitamin C, vitamin D, vitamin E, vitamin K, vitamin B-12, thiamine, riboflavin, niacin, pantothenic acid, pyridoxine, folic acid, biotin, derivatives thereof, and mixtures thereof; a flavoring agent; and an aqueous carrier.

. . . drink composition of claim 1 further comprising one or more minerals selected from the group consisting of calcium, magnesium, chromium, copper, iodine, iron, manganese molybdenum, selenium, zinc, boron, sodium, potassium, silicon, and mixtures thereof.

. . . mixture of one or more organic-solvent-extracted xanthones; one or more minerals selected from the group consisting of calcium, magnesium, chromium, copper, iodine, iron, manganese, molybdenum, selenium, zinc, boron, sodium, potassium, silicon, and mixtures thereof; a flavoring agent; and an aqueous carrier.

. . . supplement drink composition of claim 11 further comprising one or more vitamins selected from the group consisting of vitamin A, vitamin C, vitamin D, vitamin E, vitamin K, vitamin B-12, thiamine, riboflavin, niacin, pantothenic acid, pyridoxine, folic acid, biotin, derivatives thereof, and mixtures thereof.

. . . a mixture of about 1-200+10.sup.-3 parts by weight of one or more organic-solvent-extracted xanthones, about 100.sup.-3,000+10.sup.-3 parts by weight of vitamin C, about 10-800 international units of vitamin E, about 500-2,000+10.sup.-3 parts by weight of calcium, about 1-10+10.sup.-3 parts by weight of copper, about 1-40+10.sup.-3 parts by weight of iron, about 1-50+10.sup.-3 parts by weight of manganese, about 2-100+10.sup.-3 parts by weight of zinc, about 20-1,000+10.sup.-6 parts by weight of selenium, about 1-200+10.sup.-3 parts by weight of β-carotene, about 10-1,000+10.sup.-6 parts by weight of. . .

. . . of riboflavin, about 0.5-150+10.sup.-3 parts by weight of niacin or niacinamide or a mixture thereof, 1-100+10.sup.-3 parts by weight of pantothenic acid, about 1-100+10.sup.-3 parts by weight of pyridoxine, about 100.sup.-3,000+10.sup.-6 parts by weight of folic acid, about 2-160+10.sup.-6 parts by weight of vitamin B-12, about 50-5,000+10.sup.-6 parts by weight of biotin, about 25-600+10.sup.-3 parts by. . .

. . . a mixture of about 1-200+10.sup.-3 parts by weight of one or more extracted xanthones, about 100.sup.-3,000+10.sup.-3 parts by weight of vitamin C, about 10-800 international units of vitamin E, about 1,000-10,000 international units of vitamin A, about 50-1,000 international units of vitamin. . . of riboflavin, about 0.5-150+10.sup.-3 parts by weight of niacin or niacinamide or a mixture thereof, 1-100+10.sup.-3 parts by weight of pantothenic acid, about 1-100+10.sup.-3 parts by weight of pyridoxine, about 100.sup.-3,000+10.sup.-6 parts by weight of folic acid, about 2-160+10.sup.-6 parts by weight of vitamin B-12, about 50-5,000+10.sup.-6 parts by weight of biotin, about 25-600+10.sup.-3 parts by. . . 1-100+10.sup.-3 parts by weight of para-aminobenzoic acid, about 500-2,000+10.sup.-3 parts by weight of calcium, about 1-10+10.sup.-3 parts by weight of copper, about 1-40+10.sup.-3 parts by weight of iron, about 1-50+10.sup.-3 parts by weight of manganese, about 2-100+10.sup.-3 parts by weight of zinc, about 20-1,000+10.sup.-6 parts by weight of selenium, about 50-1,000+10.sup.-3 parts by weight of magnesium, about 10-500+10.sup.-6 parts by weight of. . .

. . . a flavoring agent, an aqueous carrier, and (a) one or more vitamins selected from the group consisting of vitamin A, vitamin C, vitamin D, vitamin E, vitamin K, vitamin B-12, thiamine, riboflavin, niacin, pantothenic acid, pyridoxine, folic acid, biotin, derivatives thereof, and mixtures thereof; or (b) one or more minerals selected from the group consisting of calcium, magnesium, chromium, copper, iodine, iron, manganese, molybdenum, selenium, zinc, boron, sodium, potassium, silicon, and mixtures thereof; or (c) one or more carotenoids selected from the group consisting of β-carotene,. . .

. . . a mixture of about 1-200+10.sup.-3 parts by weight of one or more extracted xanthones, about 100.sup.-3,000+10.sup.-3 parts by weight of vitamin C, about 10-800 international units of vitamin E, about 500-2,000+10.sup.-3 parts by weight of calcium, about 1-10+10.sup.-3 parts by weight of copper, about 1-40+10.sup.-3 parts by weight of iron, about 1-50+10.sup.-3 parts by weight of manganese, about 2-100+10.sup.-3 parts by weight of zinc, about 20-1,000+10.sup.-6 parts by weight of selenium, about 1-200+10.sup.-3 parts by weight of β-carotene, about 10-1,000+10.sup.-6 parts by weight of. . .

. . . of riboflavin, about 0.5-150+10.sup.-3 parts by weight of niacin or niacinamide or a mixture thereof, 1-100+10.sup.-3 parts by weight of pantothenic acid, about 1-100+10.sup.-3 parts by weight of pyridoxine, about 100.sup.-3,000+10.sup.-6 parts by weight of folic acid, about 2-160+10.sup.-6 parts by weight of vitamin B-12, about 50-5,000+10.sup.-6 parts by weight of biotin, about 25-600+10.sup.-3 parts by. . .

L6 ANSWER 5 OF 5 USPATFULL on STN

ACCESSION NUMBER:	2006:136977 USPATFULL Full-text
TITLE:	Nutritional supplements containing xanthone extracts
INVENTOR(S):	Foulger, Sidney W., Potomac, MD, UNITED STATES Wu, Yue Xuan, Rockville, MD, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2006115555	A1	20060601
APPLICATION INFO.:	US 2004-1650	A1	20041201 (11)

DOCUMENT TYPE:	Utility
FILE SEGMENT:	APPLICATION
LEGAL REPRESENTATIVE:	ALAN J. HOWARTH, P.O. BOX 1909, SANDY, UT, 84091-1909, US
NUMBER OF CLAIMS:	38
EXEMPLARY CLAIM:	1
LINE COUNT:	1892

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

SUMM . . . mixture of one or more organic-solvent-extracted xanthones and one or more vitamins selected from the group consisting of vitamin A, vitamin C, vitamin D, vitamin E, vitamin K, vitamin B-12, thiamine, riboflavin, niacin, pantothenic acid, pyridoxine, folic acid, biotin, derivatives thereof, and mixtures thereof. This nutritional supplement composition can also contain one or more minerals selected from the group consisting of calcium, magnesium, chromium, copper, iodine, iron, manganese molybdenum, selenium, zinc, boron, sodium, potassium, silicon, and mixtures thereof; one or more carotenoids selected from the group consisting of β-carotene, lutein, lycopene,. . .

SUMM . . . of one or more organic-solvent-extracted xanthones and one or more minerals selected from the group consisting of calcium, magnesium, chromium, copper, iodine, iron, manganese molybdenum, selenium, zinc, boron, sodium, potassium, silicon, and mixtures thereof.

SUMM . . . a mixture of about 1-200+10.sup.-3 parts by weight of one or more organic-solvent-extracted xanthones, about 100-3,000+10.sup.-3 parts by weight of vitamin C , about 10-800 international units of vitamin E, about 500-2,000+10.sup.-3 parts by weight of calcium, about 1-10+10.sup.-3 parts by weight of copper, about 1-40+10.sup.-3 parts by weight of iron, about 1-50+10.sup.-3 parts by weight of manganese, about 2-100+10.sup.-3 parts by weight of zinc, about 20-1,000+10.sup.-6 parts by weight of selenium, about 1-200+10.sup.-3 parts by weight of β-carotene, about 10-1,000+10.sup.-6 parts by weight of. . .

SUMM . . . or more organic-solvent-extracted xanthones and

(a) one or more vitamins selected from the group consisting of vitamin A, vitamin C, vitamin D, vitamin E, vitamin K, vitamin B-12, thiamine, riboflavin, niacin, pantothenic acid, pyridoxine, folic acid, biotin, derivatives thereof, and mixtures thereof; or

SUMM (b) one or more minerals selected from the group consisting of calcium, magnesium, chromium, copper, iodine, iron, manganese molybdenum, selenium, zinc, boron, sodium, potassium, silicon, and mixtures thereof; or

SUMM . . . a mixture of about 1-200+10.sup.-3 parts by weight of one or more organic-solvent-extracted xanthones, about 100-3,000+10.sup.-3 parts by weight of vitamin C , about 10-800 international units of vitamin E, about 500-2,000+10.sup.-3 parts by weight of calcium, about 1-10+10.sup.-3 parts by weight of copper, about 140+10.sup.-3 parts by weight of iron, about 1-50+10.sup.-3 parts by weight of manganese, about 2-100+10.sup.-3 parts by weight of zinc, about 20-1,000+10.sup.-6 parts by weight of selenium, about 1-200+10.sup.-3 parts by weight of β-carotene, about 10-1,000+10.sup.-6 parts by weight of. . .

DETD . . . an amount sufficient to prevent a deficiency thereof or to reduce the incidence of some cancers, i.e., lung (vitamin E, folic acid, vitamin D, selenium), prostate (vitamin E, vitamin D, selenium), stomach (vitamin C), colorectal (folic acid, vitamin D, selenium), skin (selenium), cervix (folic acid), and breast (vitamin D); osteoporosis (vitamin D, vitamin K, calcium, magnesium, vanadium, and possibly boron and copper); osteoarthritis (calcium); macular degeneration or cataracts (riboflavin, vitamin C, vitamin E, selenium); heart disease (vitamin E, folic acid, pyridoxine, vitamin A, magnesium, selenium, copper); neurologic disease (thiamine, niacin, pantothenic acid, folic acid, vitamin B-12); or Alzheimer's disease (vitamin E), or to aid in regeneration of connective tissue (vitamin C, copper, iron, manganese, zinc). An effective amount of a carotenoid is an amount sufficient to provide a beneficial effect, such as reduce the incidence. . .

DETD . . . of normal bone salts for the formation and growth of a sound bony structure. Certain vitamins, such as thiamine, riboflavin, pantothenic acid, and niacin, are known to be essential constituents of the respiratory enzymes that are required in the utilization of. . .

DETD Vitamin C, or ascorbic acid, is known to be essential for the formation of intercellular collagen. Symptoms of scurvy, due to vitamin C deficiency, include bleeding gums, easy bruising, and a tendency toward bone fractures. All these symptoms are a result of the requirement for vitamin C in the development of the ground substance between cells. This ground substance, primarily collagen, is the cement that gives our. . . points to the relationship of the vitamin in maintenance of tooth structures, matrix of bone, and the walls of capillaries. Vitamin C is essential for the healing of bone fractures. Such fractures heal slowly in a patient deficient in vitamin C. This is true also of wound healing.

DETD Vitamin C is also an antioxidant. Oxygen is a highly reactive element, and the process of reacting with certain chemicals is termed. . . free-radical damage appears to contribute to chronic conditions and the more antioxidant nutrition supplementation is realized to be is essential. Vitamin C is the most effective water-soluble antioxidant in human plasma. Vitamin C is also a requirement for the proper functioning of the immune system. It is involved in white blood cell production, T-cells, and macrophages. In addition, vitamin C is required in

the synthesis of neurotransmitters, steroid hormones, and carnitine, and in the conversion of cholesterol to bile acids and for enhancing iron availability. Vitamin C prevents degenerative diseases, such as cataracts, certain cancers, and cardiovascular diseases. Further, vitamin C promotes healthy cell development, proper calcium absorption, and normal tissue growth and repair, such as in healing of wounds and burns. Still further, vitamin C assists in prevention of blood clotting and bruising, and it strengthens capillary walls. Moreover, it protects against infection and assists. . .

DETD . . . is also an essential component of enzymes and aids in the utilization of protein and certain other vitamins, such as folic acid, pantothenic acid, and vitamin B-12.

DETD Folic acid or folacin is one of the important hematopoietic agents necessary for proper regeneration of blood-forming elements and their functioning. That is, folic acid is essential for creating heme, the iron-containing substance in hemoglobin, which is crucial for oxygen transport in the body. Folic acid is also involved as a coenzyme in intermediary metabolic reactions in which one-carbon units are transferred. These reactions are. . . purines and pyrimidines is ultimately linked with that of nucleotides and ribo- and deoxyribo-nucleic acids, functional elements in all cells. Folic acid also assists in digestion, in proper functioning of the nervous system, and improving mental and emotional health. Folic acid may be effective in treating depression and anxiety. Folic acid is also very important in the development of the nervous system and of a developing fetus.

DETD Pantothenic acid is of the highest biological importance because of its incorporation into Coenzyme A (CoA), which is involved in many. . . and metabolism of fatty acids, and in the synthesis of such compounds as sterols and steroid hormones, porphyrins, and acetylcholine. Pantothenic acid also participates in the utilization of vitamins; improves the body's resistance to stress; helps in cell building and the development of the central nervous system; helps the adrenal glands, and fights infections by participating in building of antibodies. Pantothenic acid plays an important role in the secretion of hormones, such as cortisone, because of its role in supporting the. . . These hormones assist in metabolism, help fight allergies, and are beneficial in the maintenance of healthy skin, muscles, and nerves. Pantothenic acid is also used in the release of energy, as well as in the metabolism of fat, proteins, and carbohydrates.. . .

DETD . . . to facilitate reduction reactions and participate in the transfer of methyl groups. Its chief importance seems to be, together with folic acid, in the anabolism of DNA in all cells. It is a requisite for normal blood formation, and certain macrocystic. . .

DETD . . . been difficult to identify choline-deficiency syndromes in humans. The Institute of Medicine noted: "Healthy males with normal folate and vitamin B12 status fed a choline deficient diet have diminished plasma choline and phosphatidylcholine concentrations, and develop liver damage. For these humans,. . .

DETD . . . it is actually a nutritional ingredient as well. Since it is a moiety of pteroylglutamic acid (PGA), a form of folic acid, some health professionals do not consider it a vitamin, but only a B-complex factor.

DETD . . . such, it aids in the utilization of amino acids, supports red blood cell formation, and assists in the manufacture of folic acid in the intestines. It has been linked to hair growth, as well as reversing the graying of hair, but these results are disappointing. People suffering from vitiligo, over-pigmentation of skin, or without pigment in some spots, have reported an improvement of the skin after more PABA was. . .

DETD . . . levels of PABA are stored in the body and may cause liver damage. PABA is best used in combination with vitamin C and the B group vitamins, particularly folic acid. Long term antibiotic use may require more PABA from the body, but PABA affects the effectiveness of sulfa drugs.. . .

DETD . . . (B-1) 1-50 + 10.sup.-3 5-30 + 10.sup.-3

Riboflavin (B-2) 1-40 + 10.sup.-3 2-20 + 10.sup.-3

Niacin/Niacinamide (B-3) 0.5-150 + 10.sup.-3 10-150 + 10.sup.-3

Pantothenic Acid (B-5) 1-100 + 10.sup.-3 5-50 + 10.sup.-6

Pyridoxine (B-6) 1-100 + 10.sup.-3 1-50 + 10.sup.-3

Folate 100-3,000 + 10.sup.-6 200-2,000 +. .

DETD . . . sulphur, and chloride) are present in the body in quantities of more than five grams. Trace elements, which include boron, copper, iron, manganese, selenium, and zinc are found in the body in quantities of less than five grams.

DETD Copper is another important trace element in the diet. The most common defect observed in copper-deficient animals is anemia. Other abnormalities include growth depression, skeletal defects, demyelination and degeneration of the nervous system, ataxia, defects in pigmentation and structure of hair or wool, reproductive failure, and cardiovascular lesions, including dissecting aneurisms. Several copper-containing metalloproteins have been isolated, including tyrosinase, ascorbic acid oxidase, laccase, cytochrome oxidase, uricase, monoamine oxidase, δ-aminolevulinic acid hydrydase, and dopamine-β-hydroxylase. Copper functions in the absorption and utilization of iron, electron transport, connective tissue metabolism, phospholipid formation, purine metabolism, and development of the nervous system. Ferroxidase I (ceruloplasmin), a copper-containing enzyme, effects the oxidation of Fe(II) to Fe(III), a required step for mobilization of stored iron. A copper-containing enzyme is thought to be responsible for the oxidative deamination of the epsilon amino group of lysine to produce desmosine and isodesmosine, the cross-links of elastin. In copper-deficient animals the arterial elastin is weaker and dissecting aneurisms may occur. Copper is required in the formation of hemoglobin, red blood cells, and bones, while it helps with the formation of elastin and collagen, thus making it necessary for wound healing. Copper is also a constituent of superoxide dismutase (SOD), a powerful enzyme that scavenges free radicals in cells.

DETD . . . lipids, and proteins, as well as in the synthesis of glucose and lipids. Manganese also enables the body to utilize vitamin C, vitamin B-1, and biotin, as well as choline. Manganese is used in the manufacture of fat, sex hormones, and breast. . .

DETD Zinc is known to occur in many important metalloenzymes. These include carbonic anhydrase, carboxypeptidases A and B, alcohol dehydrogenase, glutamic dehydrogenase,. . . dehydrogenase, lactic dehydrogenase, malic dehydrogenase, alkaline phosphatase, and aldolase. Impaired synthesis of nucleic acids and proteins has been observed in zinc deficiency. There is also evidence that zinc may be involved in the secretion of insulin and in the function of the hormone. Zinc is also necessary for a healthy immune system and is useful for treating skin conditions, such as acne and boils, and for treating sore throats. Zinc is also needed for cell

division and for growth and maintenance of muscles. Children need zinc in the diet for normal growth and sexual development. Zinc is also a constituent of superoxide dismutase (ZnSOD), which scavenges free radicals. Further, zinc is required for growth and maintenance of hair, nails, and skin.

DETD . . . Weight

Minerals	Broad	Typical
Calcium	500-2,000 + 10.sup.-3	500-1,500 + 10.sup.-3
Magnesium	50-1,000 + 10.sup.-3	100-800 + 10.sup.-3
Chromium	10-500 + 10.sup.-6	10-300 + 10.sup.-6
Copper	1-10 + 10.sup.-3	1-5 + 10.sup.-3
Iodine	10-500 + 10.sup.-6	10-300 + 10.sup.-6
Iron	1-40 + 10.sup.-3	5-20 + 10.sup.-3
Manganese	1-50 + 10.sup.-3	2-25 + 10.sup.-3
Molybdenum	5-200 + 10.sup.-6	10-100 + 10.sup.-6
Selenium	20-1,000 + 10.sup.-6	20-500 + 10.sup.-6
Zinc	2-100 + 10.sup.-3	5-40 + 10.sup.-3
Boron	100-1,000 + 10.sup.-6	200-800 + 10.sup.-6
Sodium	100-500 + 10.sup.-3	200-400 + 10.sup.-3
Potassium	10-500 +. . .	

DETD . . . art. U.S. Pat. No. 5,292,538. Examples of minerals that can be provided as amino acid chelates include calcium, magnesium, manganese, zinc, iron, boron, copper, molybdenum, chromium, and silicon. Still further, minerals can be provided as organic compounds, such as ascorbates, citrates, picolinates, aspartates, carbonates,. . . Illustrative examples of various mineral forms according to the present invention include potassium bicarbonate, sodium bicarbonate, calcium carbonate, calcium ascorbate, zinc picolinate, manganese picolinate, copper aspartate, molybdenum trioxide, chromium picolinate, potassium iodide, boron citrate, silicon amino acid chelate, and the like.

DETD . . . free radicals and are believed to reduce the risk of cancer and heart disease, decrease allergy and arthritis symptoms, promote vitamin C activity, improve the strength of blood vessels, block the progression of cataracts and macular degeneration, treat menopausal hot flashes, and. . .

DETD . . . with the intake of very high dosage of inositol. Inositol is best used with choline, B group vitamins, vitamin E, vitamin C, and linoleic acid.

DETD . . . less joint deterioration. MSM is a non-metallic organic compound that plays an essential role in human nutrition. When amino acids, zinc, copper, silicon, and vitamin C are present, the body metabolizes MSM to sulfur. Sulfur, a structural component integral to new cell growth, is stored in. . .

DETD . . . 50 800 400

Vitamin E (IU)	200	500	800	750	200	400	150	300
	800							
Vitamin K (µg)		80	200			200	20	
	80							
Vitamin C (mg)	200	1000	800	2000	1000			
	600	1800	900	800				
Thiamine (mg)		10	40			5	50	
	10							
Riboflavin (mg)		8	20			4. . .	80	
	50							
Folate (µg)		800	1200			2600	200	
	800							
Vitamin B-12 (µg)		60	100			150	5	
	60							
Biotin (µg)		300	200			50	1000	
	300							
Pantothenic Acid (mg)		15	20			5		
	75	15						
Choline (mg)		100	80			40	200	
	100							
Calcium (mg)	600	1500	800	1200	1000	600	1500	1000
	800							
Magnesium (mg)		200	100			50	1000	
	200							
Chromium (µg)		250	400			25	350	
	250							
Copper (mg)	1	10	2	4	2	10		
	2	2						
Iodine (µg)		100	50			200	20	
	100							
Iron (mg)	5	40	20	10. . .	50	4	2	40
	5							
Molybdenum (µg)		30	40			5	100	
	30							
Selenium (µg)	100	500	250	200	50	300	50	800
	250							
Zinc (mg)	10	80	20	40	100	15	100	
	10	20						
Boron (µg)		500	100			800	300	
	500							
Potassium (mg)		250	100			50. . .		

CLM What is claimed is:

. . . mixture of one or more organic-solvent-extracted xanthones and one or more vitamins selected from the group consisting of vitamin A, vitamin C, vitamin D, vitamin E, vitamin K, vitamin B-12, thiamine, riboflavin, niacin, pantothenic acid, pyridoxine, folic acid, biotin, derivatives thereof, and mixtures thereof.

. . . supplement composition of claim 1 further comprising one or more minerals selected from the group consisting of calcium, magnesium, chromium, copper, iodine, iron, manganese, molybdenum, selenium, zinc, boron, sodium, potassium, silicon, and mixtures thereof.

. . . of one or more organic-solvent-extracted xanthones and one or more minerals selected from the group consisting of calcium, magnesium, chromium, copper, iodine, iron, manganese, molybdenum, selenium, zinc, boron, sodium, potassium, silicon, and mixtures thereof.

. . . nutritional supplement composition of claim 13 further comprising one or more vitamins selected from the group consisting of vitamin A, vitamin C, vitamin D, vitamin E, vitamin K, vitamin B-12, thiamine, riboflavin, niacin, pantothenic acid, pyridoxine, folic acid, biotin, derivatives thereof, and mixtures thereof.

. . . a mixture of about 1-200+10.sup.-3 parts by weight of one or more organic-solvent-extracted xanthones, about 100-3,000+10.sup.-3 parts by weight of vitamin C, about 10-800 international units of vitamin E, about 500-2,000+10.sup.-3 parts

by weight of calcium, about 1-10+10.sup.-3 parts by weight of copper, about 1-40+10.sup.-3 parts by weight of iron, about 1-50+10.sup.-3 parts by weight of manganese, about 2-100+10.sup.-3 parts by weight of zinc, about 20-1,000+10.sup.-6 parts by weight of selenium, about 1-200+10.sup.-3 parts by weight of β-carotene, about 10-1,000+10.sup.-6 parts by weight of. . .

. . . of riboflavin, about 0.5-150+10.sup.-3 parts by weight of niacin or niacinamide or a mixture thereof, 1-100+10.sup.-3 parts by weight of pantothenic acid, about 1-100+10.sup.-3 parts by weight of pyridoxine, about 100-3,000+10.sup.-6 parts by weight of folic acid, about 2-160+10.sup.-6 parts by weight of vitamin B-12, about 50-5,000+10.sup.-6 parts by weight of biotin, about 25-600+10.sup.-3 parts by. . .

. . . a mixture of about 1-200+10.sup.-3 parts by weight of one or more extracted xanthones, about 100-3,000+10.sup.-3 parts by weight of vitamin C, about 10-800 international units of vitamin E, about 1,000-10,000 international units of vitamin A, about 50-1,000 international units of vitamin. . . of riboflavin, about 0.5-150+10.sup.-3 parts by weight of niacin or niacinamide or a mixture thereof, 1-100+10.sup.-3 parts by weight of pantothenic acid, about 1-100+10.sup.-3 parts by weight of pyridoxine, about 100-3,000+10.sup.-6 parts by weight of folic acid, about 2-160+10.sup.-6 parts by weight of vitamin B-12, about 50-5,000+10.sup.-6 parts by weight of biotin, about 25-600+10.sup.-3 parts by. . . 1-100+10.sup.-3 parts by weight of para-aminobenzoic acid, about 500-2,000+10.sup.-3 parts by weight of calcium, about 1-10+10.sup.-3 parts by weight of copper, about 1-40+10.sup.-3 parts by weight of iron, about 1-50+10.sup.-3 parts by weight of manganese, about 2-100+10.sup.-3 parts by weight of zinc, about 20-1,000+10.sup.-6 parts by weight of selenium, about 50-1,000+10.sup.-3 parts by weight of magnesium, about 10-500+10.sup.-6 parts by weight of. . .

. . . of one or more organic-solvent-extracted xanthones and (a) one or more vitamins selected from the group consisting of vitamin A, vitamin C, vitamin D, vitamin E, vitamin K, vitamin B-12, thiamine, riboflavin, niacin, pantothenic acid, pyridoxine, folic acid, biotin, derivatives thereof, and mixtures thereof; or (b) one or more minerals selected from the group consisting of calcium, magnesium, chromium, copper, iodine, iron, manganese, molybdenum, selenium, zinc, boron, sodium, potassium, silicon, and mixtures thereof; or (c) one or more carotenoids selected from the group consisting of β-carotene,. .

. . . a mixture of about 1-200+10.sup.-3 parts by weight of one or more extracted xanthones, about 100-3,000+10.sup.-3 parts by weight of vitamin C, about 10-800 international units of vitamin E, about 500-2,000+10.sup.-3 parts by weight of calcium, about 1-10+10.sup.-3 parts by weight of copper, about 1-40+10.sup.-3 parts by weight of iron, about 1-50+10.sup.-3 parts by weight of manganese, about 2-100+10.sup.-3 parts by weight of zinc, about 20-1,000+10.sup.-6 parts by weight of selenium, about 1-200+10.sup.-3 parts by weight of 5-carotene, about 10-1,000+10.sup.-6 parts by weight of. . .

. . . of riboflavin, about 0.5-150+10.sup.-3 parts by weight of niacin or niacinamide or a mixture thereof, 1-100+10.sup.-3 parts by weight of pantothenic acid, about 1-100+10.sup.-3 parts by weight of pyridoxine, about 100-3,000+10.sup.-6 parts by weight of folic acid, about 2-160+10.sup.-6 parts by weight of vitamin B-12, about 50-5,000+10.sup.-6 parts by weight of biotin, about 25-600+10.sup.-3 parts by. . .

=> dl5 1-11 ibib kwic
DL5 IS NOT A RECOGNIZED COMMAND
The previous command name entered was not recognized by the system.
For a list of commands available to you in the current file, enter
"HELP COMMANDS" at an arrow prompt (=>).

=> d l5 1-11 ibib kwic

L5 ANSWER 1 OF 11 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:722741 HCAPLUS Full-text
DOCUMENT NUMBER: 141:219003
TITLE: Method and composition for treating hypopigmentation of the hair and skin
INVENTOR(S): Vanstockum, Audrey
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 7 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2004170702	A1	20040902	US 2004-782827	20040223
WO 2004075849	A2	20040910	WO 2004-US5454	20040225
WO 2004075849	A3	20041202		

W: AE, AE, AG, AL, AL, AM, AM, AT, AT, AU, AZ, AZ, BA, BB, BG, BG, BR, BR, BW, BY, BY, BZ, BZ, CA, CH, CN, CN, CO, CO, CR, CR, CU, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EC, EC, EE, EE, EG, ES, ES, FI, FI, GB, GD, GE, GE, GH, GM, HR, HR, HU, HU, ID, IL, IN, IS, JP, JP, KE, KE, KG, KG, KP, KP, KP, KR, KR, KZ, KZ, KZ, LC, LK, LR, LS, LS, LT, LU, LV, MA, MD, MD, MG, MK, MN, MW, MX, MX, MZ, MZ, NA, NI

RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

EP 1470822	A1	20041027	EP 2004-4336	20040226

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK

PRIORITY APPLN. INFO.: US 2003-449866P P 20030227

AB A method of treating disorders marked by a loss of pigmentation, comprising the step of administering vitamin B12, copper , folic acid, and vitamin C to a patient suffering from a loss of pigmentation. Addnl., an effective amount of both pantothenic acid and zinc may be administered to said patient. Cutaneous repigmentation can be accelerated by the optional addition of exposure to sunlight or UV light.

ST vitamin B12 sublingual copper folate mixt hair skin hypopigmentation; pantothenic acid zinc hydrochloride sunlight combination therapy skin depigmentation; UV radiation vitamin C topical shampoo hair skin hypopigmentation

IT Combination chemotherapy
Drug interactions

Human
Ovarian cycle
Sex
Shampoos
Solar UV radiation
UV radiation
Vitiligo
(method and composition for treating hypopigmentation of hair and skin)

IT 50-81-7, Vitamin C, biological studies 59-30-3, Folic acid, biological studies 68-19-9, Vitamin B12 79-83-4, Pantothenic acid 7440-50-8, Copper, biological studies 7440-66-6, Zinc, biological studies 7647-01-0, Hydrochloric acid, biological studies
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(method and composition for treating hypopigmentation of hair and skin)

L5 ANSWER 2 OF 11 USPATFULL on STN

ACCESSION NUMBER:	2007:29841 USPATFULL Full-text
TITLE:	Nutritional supplements containing xanthone extracts
INVENTOR(S):	Foulger, Sidney W., Potomac, MD, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2007026109	A1	20070201
APPLICATION INFO.:	US 2006-474087	A1	20060623 (11)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 2004-1650, filed on 1 Dec 2004, PENDING		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	APPLICATION		
LEGAL REPRESENTATIVE:	ALAN J. HOWARTH, P.O. BOX 1909, SANDY, UT, 84091-1909, US		
NUMBER OF CLAIMS:	35		
EXEMPLARY CLAIM:	1		
LINE COUNT:	1886		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

SUMM . . . mixture of one or more organic-solvent-extracted xanthones and one or more vitamins selected from the group consisting of vitamin A, vitamin C, vitamin D, vitamin E, vitamin K, vitamin B-12, thiamine, riboflavin, niacin, pantothenic acid, pyridoxine, folic acid, biotin, derivatives thereof, and mixtures thereof. This nutritional supplement composition can also contain one or more minerals selected from the group consisting of calcium, magnesium, chromium, copper, iodine, iron, manganese molybdenum, selenium, zinc, boron, sodium, potassium, silicon, and mixtures thereof; one or more carotenoids selected from the group consisting of β-carotene, lutein, lycopene,. . .

SUMM . . . of one or more organic-solvent-extracted xanthones and one or more minerals selected from the group consisting of calcium, magnesium, chromium, copper, iodine, iron, manganese molybdenum, selenium, zinc, boron, sodium, potassium, silicon, and mixtures thereof.

SUMM . . . a mixture of about 1-200+10.sup.-3 parts by weight of one or more organic-solvent-extracted xanthones, about 100-3,000+10.sup.-3 parts by weight of vitamin C , about 10-800 international units of vitamin E, about 500-2,000+10.sup.-3 parts by weight of calcium, about 1-10+10.sup.-3 parts by weight of copper, about 1-40+10.sup.-3 parts by weight of iron, about 1-50+10.sup.-3 parts by weight of manganese, about 2-100+10.sup.-3 parts by weight of zinc, about 20-1,000+10.sup.-6 parts by weight of selenium, about 1-200+10.sup.-3 parts by weight of β-carotene, about 10-1,000+10.sup.-6 parts by weight of. .

SUMM (a) one or more vitamins selected from the group consisting of vitamin A, vitamin C, vitamin D, vitamin E, vitamin K, vitamin B-12, thiamine, riboflavin, niacin, pantothenic acid, pyridoxine, folic acid, biotin, derivatives thereof, and mixtures thereof; or

SUMM (b) one or more minerals selected from the group consisting of calcium, magnesium, chromium, copper, iodine, iron, manganese molybdenum, selenium, zinc, boron, sodium, potassium, silicon, and mixtures thereof; or

SUMM . . . a mixture of about 1-200+10.sup.-3 parts by weight of one or more organic-solvent-extracted xanthones, about 100-3,000+10.sup.-3 parts by weight of vitamin C , about 10-800 international units of vitamin E, about 500-2,000+10.sup.-3 parts by weight of calcium, about 1-10+10.sup.-3 parts by weight of copper, about 1-40+10.sup.-3 parts by weight of iron, about 1-50+10.sup.-3 parts by weight of manganese, about 2-100+10.sup.-3 parts by weight of zinc, about 20-1,000+10.sup.-6 parts by weight of selenium, about 1-200+10.sup.-3 parts by weight of β-carotene, about 10-1,000+10.sup.-6 parts by weight of. .

DETD . . . an amount sufficient to prevent a deficiency thereof or to reduce the incidence of some cancers, i.e., lung (vitamin E, folic acid, vitamin D, selenium), prostate (vitamin E, vitamin D, selenium), stomach (vitamin C), colorectal (folic acid, vitamin D, selenium), skin (selenium), cervix (folic acid), and breast (vitamin D); osteoporosis (vitamin D, vitamin K, calcium, magnesium, vanadium, and possibly boron and copper); osteoarthritis (calcium); macular degeneration or cataracts (riboflavin, vitamin C, vitamin E, selenium); heart disease (vitamin E, folic acid, pyridoxine, vitamin A, magnesium, selenium, copper); neurologic disease (thiamine, niacin, pantothenic acid, folic acid, vitamin B-12); or Alzheimer's disease (vitamin E), or to aid in regeneration of connective tissue (vitamin C, copper, iron, manganese, zinc). An effective amount of a carotenoid is an amount sufficient to provide a beneficial effect, such as reduce the incidence. . .

DETD Vitamin C, or ascorbic acid, is known to be essential for the formation of intercellular collagen. Symptoms of scurvy, due to vitamin C deficiency, include bleeding gums, easy bruising, and a tendency toward bone fractures. All these symptoms are a result of the requirement for vitamin C in the development of the ground substance between cells. This ground substance, primarily collagen, is the cement that gives our. . . points to the relationship of the vitamin in maintenance of tooth structures, matrix of bone, and the walls of capillaries. Vitamin C is essential for the healing of bone fractures. Such fractures heal slowly in a patient deficient in vitamin C. This is true also of wound healing.

DETD Vitamin C is also an antioxidant. Oxygen is a highly reactive element, and the process of reacting with certain chemicals is termed. . . free-radical damage appears to contribute to chronic conditions and the more antioxidant nutrition supplementation is realized to be is essential. Vitamin C is the most effective water-soluble antioxidant in human plasma. Vitamin

C is also a requirement for the proper functioning of the immune system. It is involved in white blood cell production, T-cells, and macrophages. In addition, vitamin C is required in the synthesis of neurotransmitters, steroid hormones, and carnitine, and in the conversion of cholesterol to bile acids and for enhancing iron availability. Vitamin C prevents degenerative diseases, such as cataracts, certain cancers, and cardiovascular diseases. Further, vitamin C promotes healthy cell development, proper calcium absorption, and normal tissue growth and repair, such as in healing of wounds and bums. Still further, vitamin C assists in prevention of blood clotting and bruising, and it strengthens capillary walls. Moreover, it protects against infection and assists. . .

DETD . . . is also an essential component of enzymes and aids in the utilization of protein and certain other vitamins, such as folic acid, pantothenic acid, and vitamin B-12.

DETD Folic acid or folacin is one of the important hematopoietic agents necessary for proper regeneration of blood-forming elements and their functioning. That is, folic acid is essential for creating heme, the iron-containing substance in hemoglobin, which is crucial for oxygen transport in the body. Folic acid is also involved as a coenzyme in intermediary metabolic reactions in which one-carbon units are transferred. These reactions are. . . of purines and pyrimidines is ultimately linked with that of nucleotides and ribo-and deoxyribo-nucleic acids, finctional elements in all cells. Folic acid also assists in digestion, in proper functioning of the nervous system, and improving mental and emotional health. Folic acid may be effective in treating depression and anxiety. Folic acid is also very important in the development of the nervous system and of a developing fetus.

DETD . . . to facilitate reduction reactions and participate in the transfer of methyl groups. Its chief importance seems to be, together with folic acid, in the anabolism of DNA in all cells. It is a requisite for normal blood formation, and certain macrocystic. . .

DETD . . . been difficult to identify choline-deficiency syndromes in humans. The Institute of Medicine noted: "Healthy males with normal folate and vitamin B12 status fed a choline deficient diet have diminished plasma choline and phosphatidylcholine concentrations, and develop liver damage. For these humans,. . .

DETD . . . it is actually a nutritional ingredient as well. Since it is a moiety of pteroylglutamic acid (PGA), a form of folic acid, some health professionals do not consider it a vitamin, but only a B-complex factor.

DETD . . . such, it aids in the utilization of amino acids, supports red blood cell formation, and assists in the manufacture of folic acid in the intestines. It has been linked to hair growth, as well as reversing the graying of hair, but these results are disappointing. People suffering from vitiligo, over-pigmentation of skin, or without pigment in some spots, have reported an improvement of the skin after more PABA was. . .

DETD . . . levels of PABA are stored in the body and may cause liver damage. PABA is best used in combination with vitamin C and the B group vitamins, particularly folic acid. Long term antibiotic use may require more PABA from the body, but PABA affects the effectiveness of sulfa drugs.. . .

DETD . . . sulphur, and chloride) are present in the body in quantities of more than five grams. Trace elements, which include boron, copper, iron, manganese, selenium, and zinc are found in the body in quantities of less than five grams.

DETD Copper is another important trace element in the diet. The most common defect observed in copper-deficient animals is anemia. Other abnormalities include growth depression, skeletal defects, demyelination and degeneration of the nervous system, ataxia, defects in pigmentation and structure of hair or wool, reproductive failure, and cardiovascular lesions, including dissecting aneurisms. Several copper-containing metalloproteins have been isolated, including tyrosinase, ascorbic acid oxidase, laccase, cytochrome oxidase, uricase, monoamine oxidase, δ-aminolevulinic acid hydrydase, and dopamine-β-hydroxylase. Copper functions in the absorption and utilization of iron, electron transport, connective tissue metabolism, phospholipid formation, purine metabolism, and development of the nervous system. Ferroxidase I (ceruloplasmin), a copper-containing enzyme, effects the oxidation of Fe(II) to Fe(III), a required step for mobilization of stored iron. A copper-containing enzyme is thought to be responsible for the oxidative deamination of the epsilon amino group of lysine to produce desmosine and isodesmosine, the cross-links of elastin. In copper-deficient animals the arterial elastin is weaker and dissecting aneurisms may occur. Copper is required in the formation of hemoglobin, red blood cells, and bones, while it helps with the formation of elastin and collagen, thus making it necessary for wound healing. Copper is also a constituent of superoxide dismutase (SOD), a powerful enzyme that scavenges free radicals in cells.

DETD . . . lipids, and proteins, as well as in the synthesis of glucose and lipids. Manganese also enables the body to utilize vitamin C, vitamin B-1, and biotin, as well as choline. Manganese is used in the manufacture of fat, sex hormones, and breast. . .

DETD Zinc is known to occur in many important metalloenzymes. These include carbonic anhydrase, carboxypeptidases A and B, alcohol dehydrogenase, glutamic dehydrogenase,. . . D-glyceraldehyde-3-phosphate dehydrogenase, lactic dehydrogenase, malic dehydrogenase, alkaline phosphatase, and aldolase. Impaired synthesis of nucleic acids and proteins.has been observed in zinc deficiency. There is also evidence that zinc may be involved in the secretion of insulin and in the function of the hormone. Zinc is also necessary for a healthy immune system and is useful for treating skin conditions, such as acne and boils, and for treating sore throats. Zinc is also needed for cell division and for growth and maintenance of muscles. Children need zinc in the diet for normal growth and sexual development. Zinc is also a constituent of superoxide dismutase (ZnSOD), which scavenges free radicals. Further, zinc is required for growth and maintenance of hair, nails, and skin.

DETD . . . + 10.sup.-3 500-1,500 + 10.sup.-3

Magnesium	50-1,000 + 10.sup.-3	100-800 + 10.sup.-3
Chromium	10-500 + 10.sup.-6	10-300 + 10.sup.-6
Copper	1-10 + 10.sup.-3	1-5 + 10.sup.-3
Iodine	10-500 + 10.sup.-6	10-300 + 10.sup.-6
Iron	1-40 + 10.sup.-3	5-20 + 10.sup.-3
. . . 1-50 + 10.sup.-3	2-25 + 10.sup.-3	
Molybdenum	5-200 + 10.sup.-6	10-100 + 10.sup.-6
Selenium	20-1,000 + 10.sup.-6	20-500 + 10.sup.-6
Zinc	2-100 + 10.sup.-3	5-40 + 10.sup.-3
Boron	100-1,000 + 10.sup.-6	200-800 + 10.sup.-6
Sodium	100-500 + 10.sup.-3	200-400 + 10.sup.-3

. . .

DETD . . . art. U.S. Pat. No. 5,292,538. Examples of minerals that can be provided as amino acid chelates include calcium, magnesium, manganese,

zinc, iron, boron, copper, molybdenum, chromium, and silicon. Still further, minerals can be provided as organic compounds, such as ascorbates, citrates, picolinates, aspartates, carbonates,. . . Illustrative examples of various mineral forms according to the present invention include potassium bicarbonate, sodium bicarbonate, calcium carbonate, calcium ascorbate, zinc picolinate, manganese picolinate, copper aspartate, molybdenum trioxide, chromium picolinate, potassium iodide, boron citrate, silicon amino acid chelate, and the like.

DETD . . . free radicals and are believed to reduce the risk of cancer and heart disease, decrease allergy and arthritis symptoms, promote vitamin C activity, improve the strength of blood vessels, block the progression of cataracts and macular degeneration, treat menopausal hot flashes, and. . .

DETD . . . with the intake of very high dosage of inositol. Inositol is best used with choline, B group vitamins, vitamin E, vitamin C, and linoleic acid.

DETD . . . less joint deterioration. MSM is a non-metallic organic compound that plays an essential role in human nutrition. When amino acids, zinc, copper, silicon, and vitamin C are present, the body metabolizes MSM to sulfur. Sulfur, a structural component integral to new cell growth, is stored in. . .

DETD . . . 50 800 400

Vitamin E (IU)	200	500	800	750	200	400	150	300	800
Vitamin K (μg)	80	200	200	20	80				
Vitamin C (mg)	200	1000	800	2000	1000	600	1800	900	800
Thiamine (mg)	10	40	5	50	10				
Riboflavin (mg)	8	20	4. . .	600	1500	800	1200	1000	600
Magnesium (mg)	200	100	50	1000	200				
Chromium (μg)	250	400	25	350	250				
Copper (mg)	1	10	2	4	2	10	2	2	
Iodine (μg)	100	50	200	20	100				
Iron (mg)	5	40	20	10. . .	50	4	2	40	5
Molybdenum (μg)	30	40	5	100	30				
Selenium (μg)	100	500	250	200	50	300	50	800	250
Zinc (mg)	10	80	20	40	100	15	100	10	20
Boron (μg)	500	100	800	300	500				
Potassium (mg)	250	100	50. . .						

CLM What is claimed is:

. . . (a) one or more organic-solvent-extracted xanthones; and (b) one or more vitamins selected from the group consisting of vitamin A, vitamin C, vitamin D, vitamin E, vitamin K, vitamin B-12, thiamine, riboflavin, niacin, pantothenic acid, pyridoxine, folic acid, biotin, derivatives thereof, and mixtures thereof.

. . . composition of claim 1 further consisting of one or more minerals selected from the group consisting of calcium, magnesium, chromium, copper, iodine, iron, manganese, molybdenum, selenium, zinc, boron, sodium, potassium, silicon, and mixtures thereof.

. . . one or more organic-solvent-extracted xanthones; and (b) one or more minerals selected from the group consisting of calcium, magnesium, chromium, copper, iodine, iron, manganese, molybdenum, selenium, zinc, boron, sodium, potassium, silicon, and mixtures thereof.

. . . a mixture of about 1-200+10.sup.-3 parts by weight of one or more organic-solvent-extracted xanthones, about 100-3,000+10.sup.-3 parts by weight of vitamin C, about 10-800 international units of vitamin E, about 500-2,000+10.sup.-3 parts by weight of calcium, about 1-10+10.sup.-3 parts by weight of copper, about 1-40+10.sup.-3 parts by weight of iron, about 1-50+10.sup.-3 parts by weight of manganese, about 2-100+10.sup.-3 parts by weight of zinc, about 20-1,000+10.sup.-6 parts by weight of selenium, about 1-200+10.sup.-3 parts by weight of β-carotene, about 10-1,000+10.sup.-6 parts by weight of. . .

. . . 1-100+10.sup.-3 parts by weight of pantothenic acid, about 1-100+10.sup.-3 parts by weight of pyridoxine, about 100-3,000+10.sup.-6 parts by weight of folic acid, about 2-160+10.sup.-6 parts by weight of vitamin B-12, about 50-5,000+10.sup.-6 parts by weight of biotin, about 25-600+10.sup.-3 parts by. . .

. . . a mixture of about 1-200+10.sup.-3 parts by weight of one or more extracted xanthones, about 100-3,000+10.sup.-3 parts by weight of vitamin C, about 10-800 international units of vitamin E, about 1,000-10,000 international units of vitamin A, about 50-1,000 international units of vitamin. . . 1-100+10.sup.-3 parts by weight of pantothenic acid, about 1-100+10.sup.-3 parts by weight of pyridoxine, about 100-3,000+10.sup.-6 parts by weight of folic acid, about 2-160+10.sup.-6 parts by weight of vitamin B-12, about 50-5,000+10.sup.-6 parts by weight of biotin, about 25-600+10.sup.-3 parts by. . . 1-100+10.sup.-3 parts by weight of para-aminobenzoic acid, about 500-2,000+10.sup.-3 parts by weight of calcium, about 1-10+10.sup.-3 parts by weight of copper, about 1-40+10.sup.-3 parts by weight of iron, about 1-50+10.sup.-3 parts by weight of manganese, about 2-100+10.sup.-3 parts by weight of zinc, about 20-1,000+10.sup.-6 parts by weight of selenium, about 50-1,000+10.sup.-3 parts by weight of magnesium, about 10-500+10.sup.-6 parts by weight of. . .

. . . of one or more organic-solvent-extracted xanthones and (a) one or more vitamins selected from the group consisting of vitamin A, vitamin C, vitamin D, vitamin E, vitamin K, vitamin B-12, thiamine, riboflavin, niacin, pantothenic acid, pyridoxine, folic acid, biotin, derivatives thereof, and mixtures thereof; or (b) one or more minerals selected from the group consisting of calcium, magnesium, chromium, copper, iodine, iron, manganese, molybdenum, selenium, zinc, boron, sodium, potassium, silicon, and mixtures thereof; or (c) one or more carotenoids selected from the group consisting of β-carotene,. . .

. . . a mixture of about 1-200+10.sup.-3 parts by weight of one or more extracted xanthones, about 100-3,000+10.sup.-3 parts by weight of vitamin C, about 10-800 international

units of vitamin E, about 500-2,000+10.sup.-3 parts by weight of calcium, about 1-10+10.sup.-3 parts by weight of copper, about 1-40+10.sup.-3 parts by weight of iron, about 1-50+10.sup.-3 parts by weight of manganese, about 2-100+10.sup.-3 parts by weight of zinc, about 20-1,000+10.sup.-6 parts by weight of selenium, about 1-200+10.sup.-3 parts by weight of β-carotene, about 10-1,000+10.sup.-6 parts by weight of. . . . . 1-100+10.sup.-3 parts by weight of pantothenic acid, about 1-100+10.sup.-3 parts by weight of pyridoxine, about 100-3,000+10.sup.-6 parts by weight of folic acid, about 2-160+10.sup.-6 parts by weight of vitamin B-12, and about 50-5,000+10.sup.-6 parts by weight of biotin.

L5 ANSWER 3 OF 11 USPATFULL on STN
ACCESSION NUMBER: 2007:5572 USPATFULL Full-text
TITLE: Triazolopyridine cannabinoid receptor 1 antagonists
INVENTOR(S): Sun, Chongqing, East Windsor, NJ, UNITED STATES
Sher, Philip M., Plainsboro, NJ, UNITED STATES
Wu, Gang, Princeton, NJ, UNITED STATES
Ewing, William R., Yardley, PA, UNITED STATES
Huang, Yanting, Pennington, NJ, UNITED STATES
Lee, Taekyu, Doylestown, PA, UNITED STATES
Murugesan, Natesan, Princeton Junction, NJ, UNITED STATES
Sulsky, Richard B., West Trenton, NJ, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2007004772	A1	20070104
APPLICATION INFO.:	US 2006-454322	A1	20060616 (11)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2005-692043P	20050617 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: LOUIS J. WILLE, BRISTOL-MYERS SQUIBB COMPANY, PATENT DEPARTMENT, P O BOX 4000, PRINCETON, NJ, 08543-4000, US
NUMBER OF CLAIMS: 17
EXEMPLARY CLAIM: 1
LINE COUNT: 6023
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
DETD A mixture of 2-((5-bromopyridin-2-yl)methyl)-7-(4-chlorophenyl)-8-(pyridin-4-yl)-[1,2,4]triazolo[4,3-a]pyridin-3(2H)-one (29.6 mg, 0.06 mmol), pyrazole (22.5 mg, 0.33 mmol), copper (I) iodide (8 mg, 0.042 mmol), potassium carbonate (25 mg, 0.18 mmol) and N,N-dimethylethylenediamine (5.3 mg, 0.06 mmol) in 1. . .
DETD . . . suspension was stirred in a pre-heated oil bath at 90° C. To the resulting clear brownish solution, a suspension of zinc cyanide (85.3 mg, 0.73 mmol) in anhydrous DMF (1.5 mL) was added in five portions over 5 min. The reaction. . .
DETD . . . disease (autoimmune disease of the adrenal glands); autoimmune polyglandular disease (also known as autoimmune polyglandular syndrome); autoimmune alopecia; pernicious anemia; vitiligo; autoimmune hypopituatarism; Guillain-Barre syndrome; other autoimmune diseases; glomerulonephritis; serum sickness; uticaria; allergic diseases such as respiratory allergies (asthma, hayfever, allergic. . .
DETD . . . GB 2304106; an anti-oxidant such as beta-carotene, ascorbic acid, α-tocopherol or retinol as disclosed in WO 94/15592 as well as Vitamin C and an antihomocysteine agent such as folic acid, a folate, Vitamin B6, Vitamin B12 and Vitamin E; isoniazid as disclosed in WO 97/35576; a cholesterol absorption inhibitor, an HMG-CoA synthase inhibitor, or a lanosterol. .

L5 ANSWER 4 OF 11 USPATFULL on STN
ACCESSION NUMBER: 2006:248357 USPATFULL Full-text
TITLE: Use of phenylmethimazoles, methimazole derivatives, and tautomeric cyclic thiones for the treatment of autoimmune/inflammatory diseases associated with toll-like receptor overexpression
INVENTOR(S): Kohn, Leonard D., Athens, OH, UNITED STATES
Harii, Norikazu, Yaminashi, JAPAN
Benavides-Peralta, Uruguaysito, Montevideo, URUGUAY
Gonzalez-Murguiondo, Mariana, Montevideo, URUGUAY
Lewis, Christopher J., Athens, OH, UNITED STATES
Napolitano, Giorgio, Pescara, ITALY
Giuliani, Cesidio, Roccamonce, ITALY
Malgor, Ramiro, Athens, OH, UNITED STATES
Goetz, Douglas J., Athens, OH, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2006211752	A1	20060921
APPLICATION INFO.:	US 2005-130922	A1	20050517 (11)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 2004-912948, filed on 6 Aug 2004, PENDING Continuation-in-part of Ser. No. US 2004-801986, filed on 16 Mar 2004, PENDING
DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: FROST BROWN TODD, LLC, 2200 PNC CENTER, 201 E. FIFTH STREET, CINCINNATI, OH, 45202, US
NUMBER OF CLAIMS: 167
EXEMPLARY CLAIM: 1-138
NUMBER OF DRAWINGS: 17 Drawing Page(s)
LINE COUNT: 8384
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
SUMM . . . Rheumatic Fever, Rheumatoid Arthritis, Sarcoidosis, Scleroderma, Sjogren's Syndrome, Stiffman Syndrome, Takayasu Arteritis, Temporal Arteritis/Giant Cell Arteritis, Ulcerative Colitis, Uveitis, Vasculitis, Vitiligo, Wegener's Granulomatosis, or myasthenia gravis.
SUMM . . . alpha/gamma agonists, vitamin B6 (also known as pyridoxine) and the pharmaceutically acceptable salts thereof such as the HCl salt; vitamin B12 (also known as cyanocobalamin); folic acid or a pharmaceutically acceptable salt or ester thereof such as the sodium salt and the methylglucamine salt; anti-oxidant vitamins such as vitamin C and E and beta carotene; beta-blockers; angiotensin II antagonists such as losartan; angiotensin converting enzyme inhibitors such as enalapril and. . .
DETD . . . acids including inorganic or organic bases and inorganic or organic acids. Salts derived from inorganic bases include: aluminum, ammonium, calcium, copper, ferric, ferrous, lithium, magnesium, manganic salts, manganous, potassium, sodium, zinc, and the like. Particularly preferred are the ammonium, calcium, magnesium, potassium, and sodium salts. Salts derived from pharmaceutically acceptable organic. . .
DETD Elevated serum levels of homocysteine are highly correlated with

atherosclerosis, heart disease, stroke, and peripheral vascular disease. Vitamin B6, vitamin B12, and folic acid act to lower homocysteine levels and reduce the incidence of these disease states. Vitamin B6 may be included in amounts between about 2 mg and 2 grams. Vitamin B12 may be included in amounts between about 3 μg and 2 mg. Folic acid may generally be included in amounts up to about 5 mg, such as about 400 to 800 g, about. . .

CLM What is claimed is:

. . . Rheumatic Fever, Rheumatoid Arthritis, Sarcoidosis, Scleroderma, Sjogren's Syndrome, Stiffinan Syndrome, Iakayasu Arteritis, Temporal Arteritis/Giant Cell Arteritis, Ulcerative Colitis, Uveitis, Vasculitis, Vitiligo, Wegener's Granulomatosis, or myasthenia gravis.

. . . dual agonists, vitamin B6 (also known as pyridoxine) and the pharmaceutically acceptable salts thereof such as the HCl salt; vitamin B12 (also known as cyanocobalamin); folic acid or a pharmaceutically acceptable salt or ester thereof such as the sodium salt and the methylglucamine salt; anti-oxidant vitamins such as vitamin C and E and beta carotene; beta-blockers; angiotensin II antagonists such as losartan; angiotensin converting enzyme inhibitors such as enalapril and. . .

L5 ANSWER 5 OF 11 USPATFULL on STN

ACCESSION NUMBER: 2006:189410 USPATFULL Full-text
TITLE: Bicyclic heterocycles as cannabinoid receptor modulators
INVENTOR(S): Sun, Chongqing, East Windsor, NJ, UNITED STATES
Ewing, William R., Yardley, PA, UNITED STATES
Huang, Yanting, Pennington, NJ, UNITED STATES
Pendri, Annapurna, Glastonbury, CT, UNITED STATES
Gerritz, Samuel, Guilford, CT, UNITED STATES
Ellsworth, Bruce A., Princeton, NJ, UNITED STATES
Murugesan, Natesan, Princeton Junction, NJ, UNITED STATES

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2006160850	A1	20060720	
APPLICATION INFO.:	US 2006-334204	A1	20060118	(11)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2005-644644P	20050118 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: LOUIS J. WILLE, BRISTOL-MYERS SQUIBB COMPANY, PATENT DEPARTMENT, P O BOX 4000, PRINCETON, NJ, 08543-4000, US
NUMBER OF CLAIMS: 12
EXEMPLARY CLAIM: 1
LINE COUNT: 1974
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

DETD . . . of a base, e.g. cesium carbonate, or an arylhalide in the presence of a transition metal catalyst (e.g., palladium or copper). Compounds of formula XI can be prepared by treating compound X with a reducing reagent (e.g., borane/THF complex or LAH/THF).. . .

DETD . . . trifluoroacetic acid, or sodium triacetoxyborohydride) or with an arylhalide in the presence of a transition metal catalyst (e.g., palladium or copper). Compounds of formula XVI can be prepared by removing the N-protection group (PG) under acidic (e.g., TFA for Boc-), basic. . .

DETD . . . trifluoroacetic acid, or sodium triacetoxyborohydride) or with an arylhalide in the presence of a transition metal catalyst (e.g., palladium or copper). ##STR11##

DETD . . . by treatment of intermediate XIX with a heterocyclic (e.g. a lactam, pyridone, imidazole or pyrizole) in the presence of a copper catalyst. Compounds of formula Ia can be prepared by treatment of intermediate XIX with zinc cyanide in the presence of a palladium catalyst, e.g. Pd(Ph.sub.3P).sub.4.

DETD A solution of (6-bromo-1,2,3,4-tetrahydroquinolin-3-yl)-carbamic acid tert-butyl ester (250 mg, 0.76 mmol), prepared as described in Example 1B, and zinc cyanide (88 mg, 0.75 mmol) in DMF (2.5 mL) was bubbled with argon for 10 min, then tetrakis-(triphenylphosphine) palladium(0) (65. . .

DETD . . . disease (autoimmune disease of the adrenal glands); Autoimmune polyglandular disease (also known as autoimmune polyglandular syndrome); autoimmune alopecia; pernicious anemia; vitiligo; autoimmune hypopituatarism; Guillain-Barre syndrome; other autoimmune diseases; glomerulonephritis; serum sickness; uticaria; allergic diseases such as respiratory allergies (asthma, hayfever, allergic. . .

DETD . . . GB 2304106; an anti-oxidant such as beta-carotene, ascorbic acid, α-tocopherol or retinol as disclosed in WO 94/15592 as well as Vitamin C and an antihomocysteine agent such as folic acid, a folate, Vitamin B6, Vitamin B12 and Vitamin E; isoniazid as disclosed in WO 97/35576; a cholesterol absorption inhibitor, an HMG-CoA synthase inhibitor, or a lanosterol. . .

L5 ANSWER 6 OF 11 USPATFULL on STN

ACCESSION NUMBER: 2006:158579 USPATFULL Full-text
TITLE: G protein coupled receptors and uses thereof
INVENTOR(S): Gaitanaris, George A., Seattle, WA, UNITED STATES
Bergmann, John E., Mercer Island, WA, UNITED STATES
Gragerov, Alexander, Seattle, WA, UNITED STATES
Hohmann, John, La Conner, WA, UNITED STATES
Li, Fusheng, Seattle, WA, UNITED STATES
Madisen, Linda, Seattle, WA, UNITED STATES
McIlwain, Kellie L., Renton, WA, UNITED STATES
Pavlova, Maria N., Seattle, WA, UNITED STATES
Vassilatis, Demitri, Seattle, WA, UNITED STATES
Zeng, Hongkui, Shoreline, WA, UNITED STATES
PATENT ASSIGNEE(S): Nura Inc., Seattle, WA, UNITED STATES, 98104 (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2006134109	A1	20060622	
APPLICATION INFO.:	US 2003-527265	A1	20030909	(10)
	WO 2003-US28226		20030909	
			20060126	PCT 371 date

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 2002-409303, filed on 9 Sep 2002, PENDING Continuation-in-part of Ser. No. US 2003-461329, filed on 9 Apr 2003, PENDING
DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVE, SUITE 6300, SEATTLE, WA, 98104-7092, US
NUMBER OF CLAIMS: 34
EXEMPLARY CLAIM: 1-642
NUMBER OF DRAWINGS: 9 Drawing Page(s)

LINE COUNT: 15018
GAS INDEXING IS AVAILABLE FOR THIS PATENT.

SUMM . . . erythrocute enzyme deficiency, erythrocyte membrane defects, essential thrombocythemia, factor 7 deficiency, familial cyclic neutropenia, Felty's syndrome, fibrinolytic activity, folate antagonists, folic acid deficiency, Gaucher disease, Glanzmann's thrombasthenia, glucose-6-phosphate dehydrogenase deficiency, granulated T-cell lymphocyte leukemia, granulocytic sarcoma, granulocytosis, Hageman trait, hairy cell. . . chronic lymphoproliferative disorders, T-cell prolymphocytic leukemia, thalassemias, thrombocytopenia, thrombotic thrombocytopenic purpura, toxic granulation, toxic granules in severe infection, typhus, vitamin B12 deficiency, vitamin K deficiency, Von Willebrand's disease, Waldenstrom macroglobulinemia, and Wisknock outtt-aldrich syndrome.

SUMM . . . leprosy, tuberculosis, urticaria, urticaria pigmentosa, urticarial vasculitis, vascular tumors, verruca vulgaris (common wart), vertical growild typeh phase melanoma, visceral leishmaniasis, vitiligo, warty dyskeratoma, Weber-Cockayne epidermolysis bullosa, Woringer-Knock outlopp disease, xanthomas, xeroderma pigmentosum, xerosis, and yaws.

SUMM . . . (immediate) hypersensitivity (atopy, anaphylaxis), type 2 hypersensitivity, type 3 hypersensitivity (immune complex injury), type 4 (delayed) hypersensitivity, urticaria, variable immunodeficiency, vitiligo, Wisknock Outtt-Aldrich syndrom, x-linked agammaglobulinemia, x-linked immunodeficiency with hyper IgM, x-linked lymphoproliferative syndrome, zap70 tyrosine kinase deficiency.

SUMM . . . deficiency, chronic fat malabsorption, citrullinemia, classic branched-chain ketoaciduria, classic cystinuria, congenital chloridorrhea, congenital erythropoietic porphyria, congenital generalized lipodystrophy, congenital myotonia, copper deficiency, copper toxicity, cystathionine β-synthase deficiency, cystathioninuria, cystic fibrosis, cystinosis, cystinuria, Darier disease, defect in transport of long-chain fatty acids, deficiency of cobalamin coenzyme deficiency, Dent's syndrome, diatrophic dysplasia, dibasic aminoaciduria, dicarboxylic aminoaciduria, dihydropyrimidine dehydrogenase deficiency, distal renal tubular acidosis, dry beriberi, Dubin-Johnson. . . familial hypercholesterolemia, familial hypertriglyceridemia, familial hypophosphatemic rickets, familial lipoprotein lipase deficiency, familial partial lipodystrophy, Fanconi-Bickel syndrome, fluoride deficiency, folate malabsorption, folic adic deficiency, formiminoglutamic aciduria, fructose 1,6 diphosphatase deficiency, galactokinase deficiency, galactose 1-phosphate uridyl transferase deficiency galactosemia, Gaucher disease, Gitelman's syndrone,. . . deficiency, pyrimidine 5'-nucleotidase deficiency, renal glycosuria, riboflavin deficiency, rickets, Rogers' syndrome, saccharopinuria, Sandhoff disease, Sanfilippo syndromes, sarcosinemia, Scheie disease, scurvy (vitamin C deficiency), selenium deficiency, selenosis, sialic acid storage disease, S-sulfo-L-cysteine, sulfite, thiosulfaturia, Tarui disease, Tay-Sachs disease, thiamine deficiency, tryptophan malabsorption, tryptophanuria,. . . tyrosinemia, tyrosinemia type 1, tyrosinemia type 2, tyrosinemia type 3, uridine diphosphate galactose 4-epimerase deficiency, urocanic aciduria, variegate porphyria, vitamin B12 deficiency, vitamin C toxicity, vitamin D deficiency, vitamin D-resistant rickets, vitamin d-sensitive rickets, vitamin E deficiency, vitamin E toxicity, vitamin K deficiency, vitamin K toxicity, von Gierke disease, Wernicke's encephalopathy, wet beriberi, Wilson's disease, xanthurenic aciduria, X-linked sideroblastic anemia, zinc deficiency, zinc toxicity, α-ketoadipic aciduria, α-methylacetoacetic aciduria, β-hydroxy-β-methylgl utaric aciduria, β-methylcrotonyl glycinuria.

DETD . . . erythrocute enzyme deficiency, erythrocyte membrane defects, essential thrombocythemia, factor 7 deficiency, familial cyclic neutropenia, Felty's syndrome, fibrinolytic activity, folate antagonists, folic acid deficiency, Gaucher disease, Glanzmann's thrombasthenia, glucose-6-phosphate dehydrogenase deficiency, granulated T-cell lymphocyte leukemia, granulocytic sarcoma, granulocytosis, Hageman trait, hairy cell. . . chronic lymphoproliferative disorders, T-cell prolymphocytic leukemia, thalassemias, thrombocytopenia, thrombotic thrombocytopenic purpura, toxic granulation, toxic granules in severe infection, typhus, vitamin B12 deficiency, vitamin K deficiency, Von Willebrand's disease, Waldenstrom macroglobulinemia, and Wisknock outtt-aldrich syndrome.

DETD . . . leprosy, tuberculosis, urticaria, urticaria pigmentosa, urticarial vasculitis, vascular tumors, verruca vulgaris (common wart), vertical growild typeh phase melanoma, visceral leishmaniasis, vitiligo, warty dyskeratoma, Weber-Cockayne epidermolysis bullosa, Woringer-Knock outlopp disease, xanthomas, xeroderma pigmentosum, xerosis, and yaws.

DETD . . . (immediate) hypersensitivity (atopy, anaphylaxis), type 2 hypersensitivity, type 3 hypersensitivity (immune complex injury), type 4 (delayed) hypersensitivity, urticaria, variable immunodeficiency, vitiligo, Wisknock outtt-Aldrich syndrom, x-linked agammaglobulinemia, x-linked immunodeficiency with hyper IgM, x-linked lymphoproliferative syndrome, and zap70 tyrosine kinase deficiency.

DETD . . . deficiency, chronic fat malabsorption, citrullinemia, classic branched-chain ketoaciduria, classic cystinuria, congenital chloridorrhea, congenital erythropoietic porphyria, congenital generalized lipodystrophy, congenital myotonia, copper deficiency, copper toxicity, cystathionine β-synthase deficiency, cystathioninuria, cystic fibrosis, cystinosis, cystinuria, Darier disease, defect in transport of long-chain fatty acids, deficiency of cobalamin coenzyme deficiency, Dent's syndrome, diatrophic dysplasia, dibasic aminoaciduria, dicarboxylic aminoaciduria, dihydropyrimidine dehydrogenase deficiency, distal renal tubular acidosis, dry beriberi, Dubin-Johnson. . . familial hypercholesterolemia, familial hypertriglyceridemia, familial hypophosphatemic rickets, familial lipoprotein lipase deficiency, familial partial lipodystrophy, Fanconi-Bickel syndrome, fluoride deficiency, folate malabsorption, folic adic deficiency, formiminoglutamic aciduria, fructose 1,6 diphosphatase deficiency, galactokinase deficiency, galactose 1-phosphate uridyl transferase deficiency galactosemia, Gaucher disease, Gitelman's syndrome,. . . deficiency, pyrimidine 5'-nucleotidase deficiency, renal glycosuria, riboflavin deficiency, rickets, Rogers' syndrome, saccharopinuria, Sandhoff disease, Sanfilippo syndromes, sarcosinemia, Scheie disease, scurvy (vitamin C deficiency), selenium deficiency, selenosis, sialic acid storage disease, S-sulfo-L-cysteine, sulfite, thiosulfaturia, Tarui disease, Tay-Sachs disease, thiamine deficiency, tryptophan malabsorption, tryptophanuria,. . . tyrosinemia, tyrosinemia type 1, tyrosinemia type 2, tyrosinemia type 3, uridine diphosphate galactose 4-epimerase deficiency, urocanic aciduria, variegate porphyria, vitamin B12 deficiency, vitamin C toxicity, vitamin D deficiency, vitamin D-resistant rickets, vitamin d-sensitive rickets, vitamin E deficiency, vitamin E toxicity, vitamin K deficiency, vitamin K toxicity, von Gierke disease, Wernicke's encephalopathy, wet beriberi, Wilson's disease, xanthurenic aciduria, X-linked sideroblastic anemia, zinc deficiency, zinc

toxicity, α-ketoadipic aciduria, α-methylacetoacetic aciduria, β-hydroxy-β-methylglutaric aciduria, and β-methylcrotonyl glycinuria.

DETD . . . modulating GPCR expression in native cells and animals, and cells transformed or transfected with GPCR polynucleotides. For example, the CYS2-HiS2 zinc finger proteins, which bind DNA via their zinc finger domains, have been shown to be amenable to structural changes that lead to the recognition of different target sequences. These artificial zinc finger proteins recognize specific target sites with high affinity and are able to act as gene switches to modulate gene expression. Knowledge of the particular GPCR target sequence of the present invention facilitates the engineering of zinc finger proteins specific for the target sequence using known methods such as a combination of structure-based modeling and screening of. . . Acad. Sci. USA 94:5525-5530 (1997); Greisman et aL, Science 275:657-661 (1997); Choo et aL, J MoL BioL 273:525-532 (1997)). Each zinc finger domain usually recognizes three or more base pairs. Since a recognition sequence of 18 base pairs is generally sufficient in length to render it unique in any known genome, a zinc finger protein consisting of 6 tandem repeats of zinc fingers would be expected to ensure specificity for a particular sequence (Segal et al.). The artificial zinc finger repeats, designed based on GPCR sequences, are fused to activation or repression domains to promote or suppress GPCR expression (Liu et al.). Alternatively, the zinc finger domains can be fused to the TATA box-binding factor with varying lengths of linker region between the zinc finger peptide and the TBP to create either transcriptional activators or repressors (Kim et aL., Proc. Nat. Acad. Sci. USA. . . to the target cells by transfecting constructs that express the transcription factor (gene therapy), or by introducing the protein. Engineered zinc finger proteins can also be designed to bind RNA sequences for use in therapeutics as alternatives to antisense or catalytic. . . invention contemplates methods of designing such transcription factors based on the gene sequence of the invention, as well as customized zinc finger proteins, that are useful to modulate GPCR expression in cells (native or transformed) whose genetic complement includes these sequences.

L5 ANSWER 7 OF 11 USPATFULL on STN

ACCESSION NUMBER:	2006:136978 USPATFULL Full-text
TITLE:	Nutritional supplement drink containing xanthone extracts
INVENTOR(S):	Foulger, Sidney W., Potomac, MD, UNITED STATES Wu, Yue Xuan, Rockville, MD, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2006115556	A1	20060601
APPLICATION INFO.:	US 2005-129560	A1	20050512 (11)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 2004-1650, filed on 1 Dec 2004, PENDING		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	APPLICATION		
LEGAL REPRESENTATIVE:	ALAN J. HOWARTH, P.O. BOX 1909, SANDY, UT, 84091-1909, US		
NUMBER OF CLAIMS:	28		
EXEMPLARY CLAIM:	1		
LINE COUNT:	1932		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

SUMM . . . a mixture of one or more organic-solvent-extracted xanthones; one or more vitamins selected from the group consisting of vitamin A, vitamin C, vitamin D, vitamin E, vitamin K, vitamin B-12, thiamine, riboflavin, niacin, pantothenic acid, pyridoxine, folic acid, biotin, derivatives thereof, and mixtures thereof; a flavoring agent; and an aqueous carrier. This nutritional supplement composition can also contain one or more minerals selected from the group consisting of calcium, magnesium, chromium, copper, iodine, iron, manganese molybdenum, selenium, zinc, boron, sodium, potassium, silicon, and mixtures thereof; one or more carotenoids selected from the group consisting of β-carotene, lutein, lycopene,. . .

SUMM . . . mixture of one or more organic-solvent-extracted xanthones; one or more minerals selected from the group consisting of calcium, magnesium, chromium, copper, iodine, iron, manganese molybdenum, selenium, zinc, boron, sodium, potassium, silicon, and mixtures thereof; a flavoring agent; and an aqueous carrier.

SUMM . . . a mixture of about 1-200+10.sup.-3 parts by weight of one or more organic-solvent-extracted xanthones, about 100-3,000+10.sup.-3 parts by weight of vitamin C , about 10-800 international units of vitamin E, about 500-2,000+10.sup.-3 parts by weight of calcium, about 1-10+10.sup.-3 parts by weight of copper, about 1-40+10.sup.-3 parts by weight of iron, about 1-50+10.sup.-3 parts by weight of manganese, about 2-100+10.sup.-3 parts by weight of zinc, about 20-1,000+10.sup.-6 parts by weight of selenium, about 1-200+10.sup.-3 parts by weight of P-carotene, about 10-1,000+10.sup.-6 parts by weight of. . .

SUMM . . . a flavoring agent, an aqueous carrier, and (a) one or more vitamins selected from the group consisting of vitamin A, vitamin C, vitamin D, vitamin E, vitamin K, vitamin B-12, thiamine, riboflavin, niacin, pantothenic acid, pyridoxine, folic acid, biotin, derivatives thereof, and mixtures thereof; or

SUMM (b) one or more minerals selected from the group consisting of calcium, magnesium, chromium, copper, iodine, iron, manganese molybdenum, selenium, zinc, boron, sodium, potassium, silicon, and mixtures thereof; or

SUMM . . . a mixture of about 1-200+10.sup.-3 parts by weight of one or more organic-solvent-extracted xanthones, about 100-3,000+10.sup.-3 parts by weight of vitamin C , about 10-800 international units of vitamin E, about 500-2,000+10.sup.-3 parts by weight of calcium, about 1-10+10.sup.-3 parts by weight of copper, about 1-40+10.sup.-3 parts by weight of iron, about 1-50+10.sup.-3 parts by weight of manganese, about 2-100+10.sup.-3 parts by weight of zinc, about 20-1,000+1o.sup.-6 parts by weight of selenium, about 1-200+10.sup.-3 parts by weight of β-carotene, about 10-1,000+10.sup.-6 parts by weight of. .

DETD . . . an amount sufficient to prevent a deficiency thereof or to reduce the incidence of some cancers, i.e., lung (vitamin E, folic acid, vitamin D, selenium), prostate (vitamin E, vitamin D, selenium), stomach (vitamin C), colorectal (folic acid, vitamin D, selenium), skin (selenium), cervix (folic acid), and breast (vitamin D); osteoporosis (vitamin D, vitamin K, calcium, magnesium, vanadium, and possibly boron and copper); osteoarthritis (calcium); macular degeneration or cataracts (riboflavin, vitamin C, vitamin E, selenium); heart disease (vitamin E, folic acid, pyridoxine,

vitamin A, magnesium, selenium, copper); neurologic disease (thiamine, niacin, pantothenic acid, folic acid, vitamin B-12); or Alzheimer's disease (vitamin E), or to aid in regeneration of connective tissue (vitamin C, copper, iron, manganese, zinc). An effective amount of a carotenoid is an amount sufficient to provide a beneficial effect, such as reduce the incidence. . .

DETD Vitamin C, or ascorbic acid, is known to be essential for the formation of intercellular collagen. Symptoms of scurvy, due to vitamin C deficiency, include bleeding gums, easy bruising, and a tendency toward bone fractures. All these symptoms are a result of the requirement for vitamin C in the development of the ground substance between cells. This ground substance, primarily collagen, is the cement that gives our. . . points to the relationship of the vitamin in maintenance of tooth structures, matrix of bone, and the walls of capillaries. Vitamin C is essential for the healing of bone fractures. Such fractures heal slowly in a patient deficient in vitamin C. This is true also of wound healing.

DETD Vitamin C is also an antioxidant. Oxygen is a highly reactive element, and the process of reacting with certain chemicals is termed. . . free-radical damage appears to contribute to chronic conditions and the more antioxidant nutrition supplementation is realized to be is essential. Vitamin C is the most effective water-soluble antioxidant in human plasma. Vitamin C is also a requirement for the proper functioning of the immune system. It is involved in white blood cell production, T-cells, and macrophages. In addition, vitamin C is required in the synthesis of neurotransmitters, steroid hormones, and carnitine, and in the conversion of cholesterol to bile acids and for enhancing iron availability. Vitamin C prevents degenerative diseases, such as cataracts, certain cancers, and cardiovascular diseases. Further, vitamin C promotes healthy cell development, proper calcium absorption, and normal tissue growth and repair, such as in healing of wounds and burns. Still further, vitamin C assists in prevention of blood clotting and bruising, and it strengthens capillary walls. Moreover, it protects against infection and assists. . .

DETD . . . is also an essential component of enzymes and aids in the utilization of protein and certain other vitamins, such as folic acid, pantothenic acid, and vitamin B-12.

DETD Folic acid or folacin is one of the important hematopoietic agents necessary for proper regeneration of blood-forming elements and their functioning. That is, folic acid is essential for creating heme, the iron-containing substance in hemoglobin, which is crucial for oxygen transport in the body. Folic acid is also involved as a coenzyme in intermediary metabolic reactions in which one-carbon units are transferred. These reactions are. . . purines and pyrimidines is ultimately linked with that of nucleotides and ribo- and deoxyribo-nucleic acids, functional elements in all cells. Folic acid also assists in digestion, in proper functioning of the nervous system, and improving mental and emotional health. Folic acid may be effective in treating depression and anxiety. Folic acid is also very important in the development of the nervous system and of a developing fetus.

DETD . . . to facilitate reduction reactions and participate in the transfer of methyl groups. Its chief importance seems to be, together with folic acid, in the anabolism of DNA in all cells. It is a requisite for normal blood formation, and certain macrocystic. . .

DETD . . . been difficult to identify choline-deficiency syndromes in humans. The Institute of Medicine noted: "Healthy males with normal folate and vitamin B12 status fed a choline deficient diet have diminished plasma choline and phosphatidylcholine concentrations, and develop liver damage. For these humans,. . .

DETD . . . it is actually a nutritional ingredient as well. Since it is a moiety of pteroylglutamic acid (PGA), a form of folic acid, some health professionals do not consider it a vitamin, but only a B-complex factor.

DETD . . . such, it aids in the utilization of amino acids, supports red blood cell formation, and assists in the manufacture of folic acid in the intestines. It has been linked to hair growth, as well as reversing the graying of hair, but these results are disappointing. People suffering from vitiligo, over-pigmentation of skin, or without pigment in some spots, have reported an improvement of the skin after more PABA was. . .

DETD . . . levels of PABA are stored in the body and may cause liver damage. PABA is best used in combination with vitamin C and the B group vitamins, particularly folic acid. Long term antibiotic use may require more PABA from the body, but PABA affects the effectiveness of sulfa drugs.. . .

DETD . . . sulphur, and chloride) are present in the body in quantities of more than five grams. Trace elements, which include boron, copper, iron, manganese, selenium, and zinc are found in the body in quantities of less than five grams.

DETD Copper is another important trace element in the diet. The most common defect observed in copper-deficient animals is anemia. Other abnormalities include growth depression, skeletal defects, demyelination and degeneration of the nervous system, ataxia, defects in pigmentation and structure of hair or wool, reproductive failure, and cardiovascular lesions, including dissecting aneurisms. Several copper-containing metalloproteins have been isolated, including tyrosinase, ascorbic acid oxidase, laccase, cytochrome oxidase, uricase, monoamine oxidase, δ-aminolevulinic acid hydrydase, and dopamine-β-hydroxylase. Copper functions in the absorption and utilization of iron, electron transport, connective tissue metabolism, phospholipid formation, purine metabolism, and development of the nervous system. Ferroxidase I (ceruloplasmin), a copper-containing enzyme, effects the oxidation of Fe(II) to Fe(III), a required step for mobilization of stored iron. A copper-containing enzyme is thought to be responsible for the oxidative deamination of the epsilon amino group of lysine to produce desmosine and isodesmosine, the cross-links of elastin. In copper-deficient animals the arterial elastin is weaker and dissecting aneurisms may occur. Copper is required in the formation of hemoglobin, red blood cells, and bones, while it helps with the formation of elastin and collagen, thus making it necessary for wound healing. Copper is also a constituent of superoxide dismutase (SOD), a powerful enzyme that scavenges free radicals in cells.

DETD . . . lipids, and proteins, as well as in the synthesis of glucose and lipids. Manganese also enables the body to utilize vitamin C, vitamin B-1, and biotin, as well as choline. Manganese is used in the manufacture of fat, sex hormones, and breast. . .

DETD Zinc is known to occur in many important metalloenzymes. These include carbonic anhydrase, carboxypeptidases A and B, alcohol dehydrogenase, glutamic dehydrogenase,. . . dehydrogenase, lactic dehydrogenase, malic dehydrogenase, alkaline phosphatase, and aldolase. Impaired synthesis of nucleic acids and proteins has been observed in zinc deficiency. There is also evidence that zinc may be involved in the secretion of insulin and in the function of the

hormone. Zinc is also necessary for a healthy immune system and is useful for treating skin conditions, such as acne and boils, and for treating sore throats. Zinc is also needed for cell division and for growth and maintenance of muscles. Children need zinc in the diet for normal growth and sexual development. Zinc is also a constituent of superoxide dismutase (ZnSOD), which scavenges free radicals. Further, zinc is required for growth and maintenance of hair, nails, and skin.

DETD . . . 500-2,000 + 10.sup.-3 500-1,500 + 10.sup.-3
Magnesium 50-1,000 + 10.sup.-3 100-800 + 10.sup.-3
Chromium 10-500 + 10.sup.-6 10-300 + 10.sup.-6
Copper 1-10 + 10.sup.-3 1-5 + 10.sup.-3
Iodine 10-500 + 10.sup.-6 10-300 + 10.sup.-6
Iron 1-40 + 10.sup.-3 5-20 + 10.sup.-3
. . . 1-50 + 10.sup.-3 2-25 + 10.sup.-3
Molybdenum 5-200 + 10.sup.-6 10-100 + 10.sup.-6
Selenium 20-1,000 + 10.sup.-6 20-500 + 10.sup.-6
Zinc 2-100 + 10.sup.-3 5-40 + 10.sup.-3
Boron 100-1,000 + 10.sup.-6 200-800 + 10.sup.-6
Sodium 100-500 + 10.sup.-3 200-400 + 10.sup.-3

. . .

DETD . . . the art. U.S. Pat. No.5,292,538. Examples of minerals that can be provided as amino acid chelates include calcium, magnesium, manganese, zinc, iron, boron, copper, molybdenum, chromium, and silicon. Still further, minerals can be provided as organic compounds, such as ascorbates, citrates, picolinates, aspartates, carbonates,. . . Illustrative examples of various mineral forms according to the present invention include potassium bicarbonate, sodium bicarbonate, calcium carbonate, calcium ascorbate, zinc picolinate, manganese picolinate, copper aspartate, molybdenum trioxide, chromium picolinate, potassium iodide, boron citrate, silicon amino acid chelate, and the like.

DETD . . . free radicals and are believed to reduce the risk of cancer and heart disease, decrease allergy and arthritis symptoms, promote vitamin C activity, improve the strength of blood vessels, block the progression of cataracts and macular degeneration, treat menopausal hot flashes, and. . .

DETD . . . with the intake of very high dosage of inositol. Inositol is best used with choline, B group vitamins, vitamin E, vitamin C, and linoleic acid.

DETD . . . less joint deterioration. MSM is a non-metallic organic compound that plays an essential role in human nutrition. When amino acids, zinc, copper, silicon, and vitamin C are present, the body metabolizes MSM to sulfur. Sulfur, a structural component integral to new cell growth, is stored in. . .

DETD . . . 50 800 400
Vitamin E (IU) 200 500 800 750 200 400 150 300 800
Vitamin K (µg) 80 200 200 20 80
Vitamin C (mg) 200 1000 800 2000 1000 600 1800 900 800
Thiamine (mg) 10 40 5 50 10
Riboflavin (mg) 8 20 4. . . 600 1500 800 1200 1000 600 1500 1000 800
Magnesium (mg) 200 100 50 1000 200
Chromium (µg) 250 400 25 350 250
Copper (mg) 1 10 2 4 2 10 2 2
Iodine (µg) 100 50 200 20 100
Iron (mg) 5 40 20 10. . . 50 4 2 40 5
Molybdenum (µg) 30 40 5 100 30
Selenium (µg) 100 500 250 200 50 300 50 800 250
Zinc (mg) 10 80 20 40 100 15 100 10 20
Boron (µg) 500 100 800 300 500
Potassium (mg) 250 100 50. . .

CLM What is claimed is:

. . . a mixture of one or more organic-solvent-extracted xanthones; one or more vitamins selected from the group consisting of vitamin A, vitamin C, vitamin D, vitamin E, vitamin K, vitamin B-12, thiamine, riboflavin, niacin, pantothenic acid, pyridoxine, folic acid, biotin, derivatives thereof, and mixtures thereof; a flavoring agent; and an aqueous carrier.

. . . drink composition of claim 1 further comprising one or more minerals selected from the group consisting of calcium, magnesium, chromium, copper, iodine, iron, manganese molybdenum, selenium, zinc, boron, sodium, potassium, silicon, and mixtures thereof.

. . . mixture of one or more organic-solvent-extracted xanthones; one or more minerals selected from the group consisting of calcium, magnesium, chromium, copper, iodine, iron, manganese, molybdenum, selenium, zinc, boron, sodium, potassium, silicon, and mixtures thereof; a flavoring agent; and an aqueous carrier.

. . . supplement drink composition of claim 11 further comprising one or more vitamins selected from the group consisting of vitamin A, vitamin C, vitamin D, vitamin E, vitamin K, vitamin B-12, thiamine, riboflavin, niacin, pantothenic acid, pyridoxine, folic acid, biotin, derivatives thereof, and mixtures thereof.

. . . a mixture of about 1-200+10.sup.-3 parts by weight of one or more organic-solvent-extracted xanthones, about 100.sup.-3,000+10.sup.-3 parts by weight of vitamin C, about 10-800 international units of vitamin E, about 500-2,000+10.sup.-3 parts by weight of calcium, about 1-10+10.sup.-3 parts by weight of copper, about 1-40+10.sup.-3 parts by weight of iron, about 1-50+10.sup.-3 parts by weight of manganese, about 2-100+10.sup.-3 parts by weight of zinc, about 20-1,000+10.sup.-6 parts by weight of selenium, about 1-200+10.sup.-3 parts by weight of β-carotene, about 10-1,000+10.sup.-6 parts by weight of. . .

. . . 1-100+10.sup.-3 parts by weight of pantothenic acid, about 1-100+10.sup.-3 parts by weight of pyridoxine, about 100.sup.-3,000+10.sup.-6 parts by weight of folic acid, about 2-160+10.sup.-6 parts by weight of vitamin B-12, about 50-5,000+10.sup.-6 parts by weight of biotin, about 25-600+10.sup.-3 parts by. . .

. . . a mixture of about 1-200+10.sup.-3 parts by weight of one or more extracted xanthones, about 100.sup.-3,000+10.sup.-3 parts by weight of vitamin C, about 10-800 international units of vitamin E, about 1,000-10,000 international units of vitamin A, about 50-1,000 international units of vitamin. . . 1-100+10.sup.-3 parts by weight of pantothenic acid, about 1-100+10.sup.-3 parts by weight of pyridoxine, about 100.sup.-3,000+10.sup.-6 parts by weight of folic acid, about 2-160+10.sup.-6 parts by weight of vitamin B-12, about 50-5,000+10.sup.-6 parts by weight of biotin, about 25-600+10.sup.-3 parts by. . . 1-100+10.sup.-3 parts by weight of para-aminobenzoic acid, about 500-2,000+10.sup.-3 parts by weight of calcium, about 1-10+10.sup.-3 parts by weight of copper, about 1-40+10.sup.-3 parts by weight of iron, about 1-50+10.sup.-3 parts by weight of manganese, about 2-100+10.sup.-3 parts by weight of zinc, about 20-1,000+10.sup.-6 parts by weight of selenium, about 50-1,000+10.sup.-3 parts by weight of magnesium, about 10-500+10.sup.-6 parts by weight of. . .

. . . a flavoring agent, an aqueous carrier, and (a) one or more vitamins selected from the group consisting of vitamin A, vitamin C, vitamin D, vitamin E, vitamin K, vitamin B-12, thiamine, riboflavin, niacin, pantothenic acid, pyridoxine, folic acid, biotin, derivatives thereof, and mixtures thereof; or (b) one or more minerals selected from the group consisting of calcium, magnesium, chromium, copper, iodine, iron, manganese, molybdenum, selenium, zinc, boron, sodium, potassium, silicon, and mixtures thereof; or (c) one or more carotenoids selected from the group consisting of β-carotene,. . .

. . . a mixture of about 1-200+10.sup.-3 parts by weight of one or more extracted xanthones, about 100.sup.-3,000+10.sup.-3 parts by weight of vitamin C, about 10-800 international units of vitamin E, about 500-2,000+10.sup.-3 parts by weight of calcium, about 1-10+10.sup.-3 parts by weight of copper, about 1-40+10.sup.-3 parts by weight of iron, about 1-50+10.sup.-3 parts by weight of manganese, about 2-100+10.sup.-3 parts by weight of zinc, about 20-1,000+10.sup.-6 parts by weight of selenium, about 1-200+10.sup.-3 parts by weight of β-carotene, about 10-1,000+10.sup.-6 parts by weight of. . .

. . . 1-100+10.sup.-3 parts by weight of pantothenic acid, about 1-100+10.sup.-3 parts by weight of pyridoxine, about 100.sup.-3,000+10.sup.-6 parts by weight of folic acid, about 2-160+10.sup.-6 parts by weight of vitamin B-12, about 50-5,000+10.sup.-6 parts by weight of biotin, about 25-600+10.sup.-3 parts by. . .

L5 ANSWER 8 OF 11 USPATFULL on STN

ACCESSION NUMBER:	2006:136977 USPATFULL Full-text
TITLE:	Nutritional supplements containing xanthone extracts
INVENTOR(S):	Foulger, Sidney W., Potomac, MD, UNITED STATES Wu, Yue Xuan, Rockville, MD, UNITED STATES

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2006115555	A1	20060601	
APPLICATION INFO.:	US 2004-1650	A1	20041201	(11)

DOCUMENT TYPE:	Utility
FILE SEGMENT:	APPLICATION
LEGAL REPRESENTATIVE:	ALAN J. HOWARTH, P.O. BOX 1909, SANDY, UT, 84091-1909,

US

NUMBER OF CLAIMS:	38
EXEMPLARY CLAIM:	1
LINE COUNT:	1892

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

SUMM . . . mixture of one or more organic-solvent-extracted xanthones and one or more vitamins selected from the group consisting of vitamin A, vitamin C, vitamin D, vitamin E, vitamin K, vitamin B-12, thiamine, riboflavin, niacin, pantothenic acid, pyridoxine, folic acid, biotin, derivatives thereof, and mixtures thereof. This nutritional supplement composition can also contain one or more minerals selected from the group consisting of calcium, magnesium, chromium, copper, iodine, iron, manganese molybdenum, selenium, zinc, boron, sodium, potassium, silicon, and mixtures thereof; one or more carotenoids selected from the group consisting of β-carotene, lutein, lycopene,. . .

SUMM . . . of one or more organic-solvent-extracted xanthones and one or more minerals selected from the group consisting of calcium, magnesium, chromium, copper, iodine, iron, manganese molybdenum, selenium, zinc, boron, sodium, potassium, silicon, and mixtures thereof.

SUMM . . . a mixture of about 1-200+10.sup.-3 parts by weight of one or more organic-solvent-extracted xanthones, about 100-3,000+10.sup.-3 parts by weight of vitamin C , about 10-800 international units of vitamin E, about 500-2,000+10.sup.-3 parts by weight of calcium, about 1-10+10.sup.-3 parts by weight of copper, about 1-40+10.sup.-3 parts by weight of iron, about 1-50+10.sup.-3 parts by weight of manganese, about 2-100+10.sup.-3 parts by weight of zinc, about 20-1,000+10.sup.-6 parts by weight of selenium, about 1-200+10.sup.-3 parts by weight of β-carotene, about 10-1,000+10.sup.-6 parts by weight of. .

SUMM . . . or more organic-solvent-extracted xanthones and

(a) one or more vitamins selected from the group consisting of vitamin A, vitamin C, vitamin D, vitamin E, vitamin K, vitamin B-12, thiamine, riboflavin, niacin, pantothenic acid, pyridoxine, folic acid, biotin, derivatives thereof, and mixtures thereof; or

SUMM (b) one or more minerals selected from the group consisting of calcium, magnesium, chromium, copper, iodine, iron, manganese molybdenum, selenium, zinc, boron, sodium, potassium, silicon, and mixtures thereof; or

SUMM . . . a mixture of about 1-200+10.sup.-3 parts by weight of one or more organic-solvent-extracted xanthones, about 100-3,000+10.sup.-3 parts by weight of vitamin C , about 10-800 international units of vitamin E, about 500-2,000+10.sup.-3 parts by weight of calcium, about 1-10+10.sup.-3 parts by weight of copper, about 140+10.sup.-3 parts by weight of iron, about 1-50+10.sup.-3 parts by weight of manganese, about 2-100+10.sup.-3 parts by weight of zinc, about 20-1,000+10.sup.-6 parts by weight of selenium, about 1-200+10.sup.-3 parts by weight of β-carotene, about 10-1,000+10.sup.-6 parts by weight of. .

DETD . . . an amount sufficient to prevent a deficiency thereof or to reduce the incidence of some cancers, i.e., lung (vitamin E, folic acid, vitamin D, selenium), prostate (vitamin E, vitamin

D, selenium), stomach (vitamin C), colorectal (folic acid, vitamin D, selenium), skin (selenium), cervix (folic acid), and breast (vitamin D); osteoporosis (vitamin D, vitamin K, calcium, magnesium, vanadium, and possibly boron and copper); osteoarthritis (calcium); macular degeneration or cataracts (riboflavin, vitamin C, vitamin E, selenium); heart disease (vitamin E, folic acid, pyridoxine, vitamin A, magnesium, selenium, copper); neurologic disease (thiamine, niacin, pantothenic acid, folic acid, vitamin B-12); or Alzheimer's disease (vitamin E), or to aid in regeneration of connective tissue (vitamin C, copper, iron, manganese, zinc). An effective amount of a carotenoid is an amount sufficient to provide a beneficial effect, such as reduce the incidence. . .

DETD Vitamin C, or ascorbic acid, is known to be essential for the formation of intercellular collagen. Symptoms of scurvy, due to vitamin C deficiency, include bleeding gums, easy bruising, and a tendency toward bone fractures. All these symptoms are a result of the requirement for vitamin C in the development of the ground substance between cells. This ground substance, primarily collagen, is the cement that gives our. . . points to the relationship of the vitamin in maintenance of tooth structures, matrix of bone, and the walls of capillaries. Vitamin C is essential for the healing of bone fractures. Such fractures heal slowly in a patient deficient in vitamin C. This is true also of wound healing.

DETD Vitamin C is also an antioxidant. Oxygen is a highly reactive element, and the process of reacting with certain chemicals is termed. . . free-radical damage appears to contribute to chronic conditions and the more antioxidant nutrition supplementation is realized to be is essential. Vitamin C is the most effective water-soluble antioxidant in human plasma. Vitamin C is also a requirement for the proper functioning of the immune system. It is involved in white blood cell production, T-cells, and macrophages. In addition, vitamin C is required in the synthesis of neurotransmitters, steroid hormones, and carnitine, and in the conversion of cholesterol to bile acids and for enhancing iron availability. Vitamin C prevents degenerative diseases, such as cataracts, certain cancers, and cardiovascular diseases. Further, vitamin C promotes healthy cell development, proper calcium absorption, and normal tissue growth and repair, such as in healing of wounds and burns. Still further, vitamin C assists in prevention of blood clotting and bruising, and it strengthens capillary walls. Moreover, it protects against infection and assists. . .

DETD . . . is also an essential component of enzymes and aids in the utilization of protein and certain other vitamins, such as folic acid, pantothenic acid, and vitamin B-12.

DETD Folic acid or folacin is one of the important hematopoietic agents necessary for proper regeneration of blood-forming elements and their functioning. That is, folic acid is essential for creating heme, the iron-containing substance in hemoglobin, which is crucial for oxygen transport in the body. Folic acid is also involved as a coenzyme in intermediary metabolic reactions in which one-carbon units are transferred. These reactions are. . . purines and pyrimidines is ultimately linked with that of nucleotides and ribo- and deoxyribo-nucleic acids, functional elements in all cells. Folic acid also assists in digestion, in proper functioning of the nervous system, and improving mental and emotional health. Folic acid may be effective in treating depression and anxiety. Folic acid is also very important in the development of the nervous system and of a developing fetus.

DETD . . . to facilitate reduction reactions and participate in the transfer of methyl groups. Its chief importance seems to be, together with folic acid, in the anabolism of DNA in all cells. It is a requisite for normal blood formation, and certain macrocystic. . .

DETD . . . been difficult to identify choline-deficiency syndromes in humans. The Institute of Medicine noted: "Healthy males with normal folate and vitamin B12 status fed a choline deficient diet have diminished plasma choline and phosphatidylcholine concentrations, and develop liver damage. For these humans,. . .

DETD . . . it is actually a nutritional ingredient as well. Since it is a moiety of pteroylglutamic acid (PGA), a form of folic acid, some health professionals do not consider it a vitamin, but only a B-complex factor.

DETD . . . such, it aids in the utilization of amino acids, supports red blood cell formation, and assists in the manufacture of folic acid in the intestines. It has been linked to hair growth, as well as reversing the graying of hair, but these results are disappointing. People suffering from vitiligo, over-pigmentation of skin, or without pigment in some spots, have reported an improvement of the skin after more PABA was. . .

DETD . . . levels of PABA are stored in the body and may cause liver damage. PABA is best used in combination with vitamin C and the B group vitamins, particularly folic acid. Long term antibiotic use may require more PABA from the body, but PABA affects the effectiveness of sulfa drugs.. . .

DETD . . . sulphur, and chloride) are present in the body in quantities of more than five grams. Trace elements, which include boron, copper, iron, manganese, selenium, and zinc are found in the body in quantities of less than five grams.

DETD Copper is another important trace element in the diet. The most common defect observed in copper-deficient animals is anemia. Other abnormalities include growth depression, skeletal defects, demyelination and degeneration of the nervous system, ataxia, defects in pigmentation and structure of hair or wool, reproductive failure, and cardiovascular lesions, including dissecting aneurisms. Several copper-containing metalloproteins have been isolated, including tyrosinase, ascorbic acid oxidase, laccase, cytochrome oxidase, uricase, monoamine oxidase, δ-aminolevulinic acid hydrydase, and dopamine-β-hydroxylase. Copper functions in the absorption and utilization of iron, electron transport, connective tissue metabolism, phospholipid formation, purine metabolism, and development of the nervous system. Ferroxidase I (ceruloplasmin), a copper-containing enzyme, effects the oxidation of Fe(II) to Fe(III), a required step for mobilization of stored iron. A copper-containing enzyme is thought to be responsible for the oxidative deamination of the epsilon amino group of lysine to produce desmosine and isodesmosine, the cross-links of elastin. In copper-deficient animals the arterial elastin is weaker and dissecting aneurisms may occur. Copper is required in the formation of hemoglobin, red blood cells, and bones, while it helps with the formation of elastin and collagen, thus making it necessary for wound healing. Copper is also a constituent of superoxide dismutase (SOD), a powerful enzyme that scavenges free radicals in cells.

DETD . . . lipids, and proteins, as well as in the synthesis of glucose and lipids. Manganese also enables the body to utilize vitamin C, vitamin B-1, and biotin, as well as choline. Manganese is used in the manufacture of fat, sex hormones, and breast. . .

DETD Zinc is known to occur in many important metalloenzymes. These include carbonic anhydrase, carboxypeptidases A and B, alcohol dehydrogenase, glutamic dehydrogenase,. . . dehydrogenase, lactic dehydrogenase, malic dehydrogenase, alkaline phosphatase, and aldolase. Impaired synthesis of nucleic acids and proteins has been observed in zinc deficiency. There is also evidence that zinc may be involved in the secretion of insulin and in the function of the hormone. Zinc is also necessary for a healthy immune system and is useful for treating skin conditions, such as acne and boils, and for treating sore throats. Zinc is also needed for cell division and for growth and maintenance of muscles. Children need zinc in the diet for normal growth and sexual development. Zinc is also a constituent of superoxide dismutase (ZnSOD), which scavenges free radicals. Further, zinc is required for growth and maintenance of hair, nails, and skin.

DETD . . . Weight

Minerals	Broad	Typical
Calcium	500-2,000 + 10.sup.-3	500-1,500 + 10.sup.-3
Magnesium	50-1,000 + 10.sup.-3	100-800 + 10.sup.-3
Chromium	10-500 + 10.sup.-6	10-300 + 10.sup.-6
Copper	1-10 + 10.sup.-3	1-5 + 10.sup.-3
Iodine	10-500 + 10.sup.-6	10-300 + 10.sup.-6
Iron	1-40 + 10.sup.-3	5-20 + 10.sup.-3
Manganese	1-50 + 10.sup.-3	2-25 + 10.sup.-3
Molybdenum	5-200 + 10.sup.-6	10-100 + 10.sup.-6
Selenium	20-1,000 + 10.sup.-6	20-500 + 10.sup.-6
Zinc	2-100 + 10.sup.-3	5-40 + 10.sup.-3
Boron	100-1,000 + 10.sup.-6	200-800 + 10.sup.-6
Sodium	100-500 + 10.sup.-3	200-400 + 10.sup.-3
Potassium	10-500 +. . .	

DETD . . . art. U.S. Pat. No. 5,292,538. Examples of minerals that can be provided as amino acid chelates include calcium, magnesium, manganese, zinc, iron, boron, copper, molybdenum, chromium, and silicon. Still further, minerals can be provided as organic compounds, such as ascorbates, citrates, picolinates, aspartates, carbonates,. . . Illustrative examples of various mineral forms according to the present invention include potassium bicarbonate, sodium bicarbonate, calcium carbonate, calcium ascorbate, zinc picolinate, manganese picolinate, copper aspartate, molybdenum trioxide, chromium picolinate, potassium iodide, boron citrate, silicon amino acid chelate, and the like.

DETD . . . free radicals and are believed to reduce the risk of cancer and heart disease, decrease allergy and arthritis symptoms, promote vitamin C activity, improve the strength of blood vessels, block the progression of cataracts and macular degeneration, treat menopausal hot flashes, and. . .

DETD . . . with the intake of very high dosage of inositol. Inositol is best used with choline, B group vitamins, vitamin E, vitamin C, and linoleic acid.

DETD . . . less joint deterioration. MSM is a non-metallic organic compound that plays an essential role in human nutrition. When amino acids, zinc, copper, silicon, and vitamin C are present, the body metabolizes MSM to sulfur. Sulfur, a structural component integral to new cell growth, is stored in. . .

DETD . . . 50 800 400

Vitamin E (IU)	200	500	800	750	200	400	150	300
800								
Vitamin K (µg)		80	200			200	20	
80								
Vitamin C (mg)		200	1000	800	2000	1000		
600	1800	900	800					
Thiamine (mg)			10	40			5	50
10								
Riboflavin (mg)			8	20			4. . .	600
1500	800	1200	1000	600	1500	1000	800	
Magnesium (mg)			200		100		50	1000
200								
Chromium (µg)			250		400		25	350
250								
Copper (mg)		1	10	2	4	2		10
2	2							
Iodine (µg)			100		50		200	20
100								
Iron (mg)	5	40	20	10. . .	50	4	2	40
5								
Molybdenum (µg)			30		40		5	100
30								
Selenium (µg)	100	500	250	200	50	300	50	800
250								
Zinc (mg)		10	80	20	40	100	15	100
10	20							
Boron (µg)			500		100		800	300
500								
Potassium (mg)			250		100		50. . .	

CLM What is claimed is:

. . . mixture of one or more organic-solvent-extracted xanthones and one or more vitamins selected from the group consisting of vitamin A, vitamin C, vitamin D, vitamin E, vitamin K, vitamin B-12, thiamine, riboflavin, niacin, pantothenic acid, pyridoxine, folic acid, biotin, derivatives thereof, and mixtures thereof.

. . . supplement composition of claim 1 further comprising one or more minerals selected from the group consisting of calcium, magnesium, chromium, copper, iodine, iron, manganese, molybdenum, selenium, zinc, boron, sodium, potassium, silicon, and mixtures thereof.

. . . of one or more organic-solvent-extracted xanthones and one or more minerals selected from the group consisting of calcium, magnesium, chromium, copper, iodine, iron, manganese, molybdenum, selenium, zinc, boron, sodium, potassium, silicon, and mixtures thereof.

. . . nutritional supplement composition of claim 13 further comprising one or more vitamins selected from the group consisting of vitamin A, vitamin C, vitamin D, vitamin E, vitamin K, vitamin B-12, thiamine, riboflavin, niacin, pantothenic acid, pyridoxine, folic acid, biotin, derivatives thereof, and mixtures thereof.

. . . a mixture of about 1-200+10.sup.-3 parts by weight of one or more organic-solvent-extracted xanthones, about 100-3,000+10.sup.-3 parts by weight of vitamin C, about 10-800 international units of vitamin E, about 500-2,000+10.sup.-3 parts by weight of calcium, about 1-10+10.sup.-3 parts by weight of copper, about 1-40+10.sup.-3 parts by weight of iron, about 1-50+10.sup.-3 parts by weight of manganese, about 2-100+10.sup.-3 parts by weight of zinc, about 20-1,000+10.sup.-6 parts by weight of selenium, about

1-200+10.sup.-3 parts by weight of β-carotene, about
10-1,000+10.sup.-6 parts by weight of. . .
. . . 1-100+10.sup.-3 parts by weight of pantothenic acid, about
1-100+10.sup.-3 parts by weight of pyridoxine, about
100-3,000+10.sup.-6 parts by weight of folic acid, about
2-160+10.sup.-6 parts by weight of vitamin B-12, about
50-5,000+10.sup.-6 parts by weight of biotin, about
25-600+10.sup.-3 parts by. . .
. . . a mixture of about 1-200+10.sup.-3 parts by weight of one or more extracted xanthones, about 100-3,000+10.sup.-3 parts by weight of vitamin C, about 10-800 international units of vitamin E, about 1,000-10,000 international units of vitamin A, about 50-1,000 international units of vitamin. . .
1-100+10.sup.-3 parts by weight of pantothenic acid, about
1-100+10.sup.-3 parts by weight of pyridoxine, about
100-3,000+10.sup.-6 parts by weight of folic acid, about
2-160+10.sup.-6 parts by weight of vitamin B-12, about
50-5,000+10.sup.-6 parts by weight of biotin, about
25-600+10.sup.-3 parts by. . . 1-100+10.sup.-3 parts by weight of para-aminobenzoic acid, about 500-2,000+10.sup.-3 parts by weight of calcium, about 1-10+10.sup.-3 parts by weight of copper, about 1-40+10.sup.-3 parts by weight of iron, about 1-50+10.sup.-3 parts by weight of manganese, about 2-100+10.sup.-3 parts by weight of zinc, about 20-1,000+10.sup.-6 parts by weight of selenium, about 50-1,000+10.sup.-3 parts by weight of magnesium, about 10-500+10.sup.-6 parts by weight of. . .
. . . of one or more organic-solvent-extracted xanthones and (a) one or more vitamins selected from the group consisting of vitamin A, vitamin C, vitamin D, vitamin E, vitamin K, vitamin B-12, thiamine, riboflavin, niacin, pantothenic acid, pyridoxine, folic acid, biotin, derivatives thereof, and mixtures thereof; or (b) one or more minerals selected from the group consisting of calcium, magnesium, chromium, copper, iodine, iron, manganese, molybdenum, selenium, zinc, boron, sodium, potassium, silicon, and mixtures thereof; or (c) one or more carotenoids selected from the group consisting of β-carotene,. . .
. . . a mixture of about 1-200+10.sup.-3 parts by weight of one or more extracted xanthones, about 100-3,000+10.sup.-3 parts by weight of vitamin C, about 10-800 international units of vitamin E, about 500-2,000+10.sup.-3 parts by weight of calcium, about 1-10+10.sup.-3 parts by weight of copper, about 1-40+10.sup.-3 parts by weight of iron, about 1-50+10.sup.-3 parts by weight of manganese, about 2-100+10.sup.-3 parts by weight of zinc, about 20-1,000+10.sup.-6 parts by weight of selenium, about 1-200+10.sup.-3 parts by weight of 5-carotene, about 10-1,000+10.sup.-6 parts by weight of. . .
. . . 1-100+10.sup.-3 parts by weight of pantothenic acid, about
1-100+10.sup.-3 parts by weight of pyridoxine, about
100-3,000+10.sup.-6 parts by weight of folic acid, about
2-160+10.sup.-6 parts by weight of vitamin B-12, about
50-5,000+10.sup.-6 parts by weight of biotin, about
25-600+10.sup.-3 parts by. . .

L5 ANSWER 9 OF 11 USPATFULL on STN
ACCESSION NUMBER: 2005:196967 USPATFULL Full-text
TITLE: Azabicyclic heterocycles as cannabinoid receptor modulators
INVENTOR(S): Yu, Guixue, Princeton Junction, NJ, UNITED STATES
Ewing, William R., Yardley, PA, UNITED STATES
Mikkilineni, Amarendra B., Easton, PA, UNITED STATES
Pendri, Annapurna, Glastonbury, CT, UNITED STATES
Ellsworth, Bruce A., Princeton, NJ, UNITED STATES
Sher, Philip M., Plainsboro, NJ, UNITED STATES
Gerritz, Samuel, Guilford, CT, UNITED STATES
Sun, Chongqing, East Windsor, NJ, UNITED STATES
Murugesan, Natesan, Princeton Junction, NJ, UNITED STATES
Wu, Ximao, Princeton Junction, NJ, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005171110	A1	20050804
APPLICATION INFO.:	US 2004-16198	A1	20041217 (11)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2003-531451P	20031219 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: STEPHEN B. DAVIS, BRISTOL-MYERS SQUIBB COMPANY, PATENT DEPARTMENT, P O BOX 4000, PRINCETON, NJ, 08543-4000, US
NUMBER OF CLAIMS: 73
EXEMPLARY CLAIM: 1
LINE COUNT: 2556
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
DETD . . . a metalloid such as lithium or magnesium and the like, or such metal is exchanged for another metal such as zinc, tin, palladium and the like. Reaction with another group L, R.sup.1-L or R.sup.2-L gives compounds of formula II that can. . .
DETD . . . precursor to R.sup.5-M known to those skilled in the art where M is hydrogen or metalloid, such as boron, tin, zinc, copper, potassium, sodium and the like. This coupling may optionally be facilitated by catalysts such as Pd(0), Cu(I) and the like.. . .
DETD . . . presence of a base such as K.sub.2CO.sub.3 and solvents such as DMF, THF and the like, optionally catalyzed by palladium, copper and the like to give compounds of formula I. Examples of such transformations can be found herein and in, Edmondson,. . .
DETD . . . into compounds of formula XI by reaction of R.sup.1-M or R.sup.2-M optionally catalyzed by a transition metal such as palladium, copper and the like. M is defined as a metalloid such as tin, boron, sodium, lithium and the like or M. . . Compounds of formula XI can be reacted with R.sup.1-M or R.sup.2-M optionally catalyzed by a transition metal such as palladium, copper and the like to give compounds of formula X. Examples of such transformations may be found herein and in: Matyus,. . .
DETD . . . disease (autoimmune disease of the adrenal glands); Autoimmune polyglandular disease (also known as autoimmune polyglandular syndrome); autoimmune alopecia; pernicious anemia; vitiligo; autoimmune hypopituatarism; Guillain-Barre syndrome; other autoimmune diseases; glomerulonephritis; serum sickness; uticaria; allergic diseases such as respiratory allergies (asthma, hayfever, allergic. . .
DETD . . . GB 2304106; an anti-oxidant such as beta-carotene, ascorbic acid, α-tocopherol or retinol as disclosed in WO 94/15592 as well as Vitamin C and an antihomocysteine agent such as folic acid, a folate, Vitamin B6, Vitamin B12 and Vitamin E; isoniazid as disclosed in WO 97/35576; a cholesterol absorption inhibitor, an HMG-CoA synthase inhibitor, or a lanosterol. .

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CLM What is claimed is:

. . . catabolism promoter; a sodium-proton exchange inhibitor; an LDL-receptor inducer; steroidal glycoside; an anti-oxidant selected from beta-carotene, ascorbic acid, α-tocopherol, retinol, Vitamin C antihomocysteine agent, folic acid, a folate, Vitamin B6, Vitamin B12 and Vitamin E; isoniazid; a cholesterol absorption inhibitor; an HMG-CoA synthase inhibitor; a lanosterol demethylase inhibitor; a PPAR δ agonist.

. .

. . . thyroiditis; Sjogren's syndrome; autoimmune hyperthyroidism, such as Graves' Disease; Addison's disease; autoimmune polyglandular disease or syndrome; autoimmune alopecia; pernicious anemia; vitiligo; autoimmune hypopituatarism; Guillain-Barre syndrome; other autoimmune diseases; glomerulonephritis; serum sickness; uticaria; asthma, hayfever, allergic rhinitis and skin allergies; scleracierma; mycosis.

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L5 ANSWER 10 OF 11 USPATFULL on STN

ACCESSION NUMBER: 2005:63617 USPATFULL Full-text

TITLE: Pyrazine modulators of cannabinoid receptors

INVENTOR(S): Ellsworth, Bruce A., Princeton, NJ, UNITED STATES
Sun, Chongqing, East Windsor, NJ, UNITED STATES
Pendri, Annapurna, Glastonbury, CT, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005054659	A1	20050310
APPLICATION INFO.:	US 2004-917199	A1	20040812 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2003-495807P	20030815 (60)

DOCUMENT TYPE: Utility

FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: STEPHEN B. DAVIS, BRISTOL-MYERS SQUIBB COMPANY, PATENT DEPARTMENT, P O BOX 4000, PRINCETON, NJ, 08543-4000

NUMBER OF CLAIMS: 60

EXEMPLARY CLAIM: 1

LINE COUNT: 2334

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

SUMM . . . a leaving group such as bromine, chlorine, OTf, with M--A where M is hydrogen or metalloid, such as boron, tin, zinc, copper, potassium, sodium and the like. This coupling may be facilitated by catalysts such as Pd(0), Cu(I) and the like. Examples. . .

SUMM . . . a metalloid such as lithium or magnesium and the like, or such metal is exchanged for another metal such as zinc, tin, palladium and the like. Compounds of formula VIII can be reacted with sulfur electrophiles such as R.sup.7SSR.sup.7 or SO.sub.2Cl.sub.2. . .

DETD . . . disease (autoimmune disease of the adrenal glands); Autoimmune polyglandular disease (also known as autoimmune polyglandular syndrome); autoimmune alopecia; pernicious anemia; vitiligo; autoimmune hypopituatarism; Guillain-Barre syndrome; other autoimmune diseases; glomerulonephritis; serum sickness; uticaria; allergic diseases such as respiratory allergies (asthma, hayfever, allergic. . .

DETD . . . GB 2304106; an anti-oxidant such as beta-carotene, ascorbic acid, α-tocopherol or retinol as disclosed in WO 94/15592 as well as Vitamin C and an antihomocysteine agent such as folic acid, a folate, Vitamin B6, Vitamin B12 and Vitamin E; isoniazid as disclosed in WO 97/35576; a cholesterol absorption inhibitor, an HMG-CoA synthase inhibitor, or a lanosterol. .

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CLM What is claimed is:

. . . catabolism promoter; a sodium-proton exchange inhibitor; an LDL-receptor inducer; steroidal glycoside; an anti-oxidant selected from beta-carotene, ascorbic acid, α-tocopherol, retinol, Vitamin C antihomocysteine agent, folic acid, a folate, Vitamin B6, Vitamin B12 and Vitamin E; isoniazid; a cholesterol absorption inhibitor; an HMG-CoA synthase inhibitor; a lanosterol demethylase inhibitor; a PPAR δ agonist.

. .

. . . thyroiditis; Sjogren's syndrome; Autoimmune hyperthyroidism, such as Graves' Disease; Addison's disease; autoimmune polyglandular disease or syndrome; autoimmune alopecia; pernicious anemia; vitiligo; autoimmune hypopituatarism; Guillain-Barre syndrome; other autoimmune diseases; glomerulonephritis; serum sickness; uticaria; asthma, hayfever, allergic rhinitis and skin allergies; scleracierma; mycosis.

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L5 ANSWER 11 OF 11 USPATFULL on STN

ACCESSION NUMBER: 2005:17384 USPATFULL Full-text

TITLE: Tetrahydroquinoline derivatives as cannabinoid receptor modulators

INVENTOR(S): Sun, Chongqing, East Windsor, NJ, UNITED STATES
Sitkoff, Doree, Dresher, PA, UNITED STATES
Ewing, William R., Yardley, PA, UNITED STATES
Huang, Yanting, Pennington, NJ, UNITED STATES
Ellsworth, Bruce A., Princeton, NJ, UNITED STATES
Sulsky, Richard B., West Trenton, NJ, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005014786	A1	20050120
APPLICATION INFO.:	US 2004-889274	A1	20040712 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2003-486774P	20030711 (60)

DOCUMENT TYPE: Utility

FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: STEPHEN B. DAVIS, BRISTOL-MYERS SQUIBB COMPANY, PATENT DEPARTMENT, P O BOX 4000, PRINCETON, NJ, 08543-4000

NUMBER OF CLAIMS: 56

EXEMPLARY CLAIM: 1

LINE COUNT: 4140

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

DETD . . . pyridone, imidazole or pyrizole) or a hydroxyarene (e.g. phenol), or a hydroxyheteroarene of formula XXVIII in the presence of a copper catalyst. Compounds of formula Ig can be prepared by treatment of intermediate Id with zinc cyanide in the presence of a palladium catalyst, e.g. Pd(Ph.sub.3P).sub.4. It is understood that each of the non-aromatic carbons of. . .

DETD [0168] A solution of 1B (250 mg, 0.76 mmol) and zinc cyanide (88 mg, 0.75 mmol) in DMF (2.5 mL) was bubbled with argon for 10 min, then tetrakis-(triphenylphosphine)palladium(0) (65 mg,. . .

DETD . . . To a suspension of 87B (229 mg, 0.5 mmol), 2-hydroxypyridine (71.3 mg, 0.75 mmol), K.sub.2CO.sub.3 (138.2 mg, 1.0 mmol) and copper iodide (47.6 mg, 0.25 mmol) in DMF (i.o mL) was added

N,N'-dimethylethylenediamine (27 µL, 025 mmol). The resulting blue suspension. . .

DETD [0397] A suspension of 87B (55 mg, 0.12 mmol), phenol (33.9 mg, 0.36 mmol), K.sub.2CO.sub.3 (50 mg, 0.36 mmol) and copper iodide (17.1 mg, 0.09 mmol) in DMF (1.0 mL) was heated at 200° C. in a sealed tube with stirring. . .

DETD . . . disease (autoimmune disease of the adrenal glands); Autoimmune polyglandular disease (also known as autoimmune polyglandular syndrome); autoimmune alopecia; pernicious anemia; vitiligo; autoimmune hypopituatarism; Guillain-Barre syndrome; other autoimmune diseases; glomerulonephritis; serum sickness; uticaria; allergic diseases such as respiratory allergies (asthma, hayfever, allergic. . .

DETD . . . GB 2304106; an anti-oxidant such as beta-carotene, ascorbic acid, α-tocopherol or retinol as disclosed in WO 94/15592 as well as Vitamin C and an antihomocysteine agent such as folic acid, a folate, Vitamin B6, Vitamin B12 and Vitamin E; isoniazid as disclosed in WO 97/35576; a cholesterol absorption inhibitor, an HMG-CoA synthase inhibitor, or a lanosterol. .

CLM What is claimed is:

. . . catabolism promoter; a sodium-proton exchange inhibitor; an LDL-receptor inducer; steroidal glycoside; an anti-oxidant selected from beta-carotene, ascorbic acid, α-tocopherol, retinol, Vitamin C antihomocysteine agent, folic acid, a folate, Vitamin B6, Vitamin B12 and Vitamin E; isoniazid; a cholesterol absorption inhibitor; an HMG-CoA synthase inhibitor; a lanosterol demethylase inhibitor; a PPAR δ agonist. . .

. . . thyroiditis; Sjogren's syndrome; autoimmune hyperthyroidism, such as Graves' Disease; Addison's disease; autoimmune polyglandular disease or syndrome; autoimmune alopecia; pernicious anemia; vitiligo; autoimmune hypopituatarism; Guillain-Barre syndrome; other autoimmune diseases; glomerulonephritis; serum sickness; uticaria; asthma, hayfever, allergic rhinitis and skin allergies; scleracierma; mycosis. . .

=> s montes and vitiligo
L7 4 MONTES AND VITILIGO

=> d l7 1-4 ibib kwic

L7 ANSWER 1 OF 4 USPATFULL on STN
ACCESSION NUMBER: 2006:159887 USPATFULL Full-text
TITLE: Use of angiotensin receptor blockers (ARBs) to treat diseases associated with excess ACE
INVENTOR(S): Moskowitz, David W., St. Louis, MO, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2006135422	A1	20060622
APPLICATION INFO.:	US 2004-820479	A1	20040331 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2003-463437P	20030417 (60)
	US 2003-465908P	20030425 (60)
	US 2003-473262P	20030527 (60)
	US 2003-477387P	20030611 (60)
	US 2003-482553P	20030626 (60)
	US 2003-500933P	20030908 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: Sonnenschein Nath & Rosenthal, P. O. Box 061080, Wacker Drive Station, Sears Tower, Chicago, IL, 60606-1080, US
NUMBER OF CLAIMS: 15
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 12 Drawing Page(s)
LINE COUNT: 2821
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
SUMM . . . Brown, N. J.; Vaughan, D. E. Prothrombotic effects of angiotensin. Adv Intern Med, 2000, 45, 419-429.

163. Perez-Ruiz, A.; Montes, R.; Velasco, F.; Lopez-Pedrera, C.; Antonio-Paramo, J.; Orbe, J.; Hermida, J.; Rocha, E. Regulation by nitric oxide of endotoxin-induced tissue. . .

DETD Vitiligo is an autoimmune disease characterized by loss of skin pigmentation. It usually begins around age 20 (2) and affects patches of skin, but can progress to involve the entire body. Vitiligo appears to be due to an autoimmune attack by a person's T lymphocytes against the skin cells that produce pigment, the melanocytes. Although not life-threatening, the disease can be disfiguring. Vitiligo affects perhaps 500,000 people in the United States, and many more worldwide. Current treatment is expensive and not available everywhere. It is reasonable to expect that treatment of vitiligo with an effective dose of ACE inhibitor or ARB would reduce symptoms of this disease.

DETD . . . S, Barber B H, Spaner D, DeBenedette M A. Cytotoxic T lymphocyte reactivity to gp100, MelanA/MART-1, and tyrosinase, in HLA-A2-positive vitiligo patients. J Invest Dermatol. 2003 September;121(3):550-6. PMID: 12925214

(2) Das S K, Majumder P P, Chakraborty R, Majumdar T K, Haldar B.Genet Epidemiol. 1985; 2(1):71-8. Studies on vitiligo. I. Epidemiological profile in Calcutta, India. PMID: 4054593

L7 ANSWER 2 OF 4 USPATFULL on STN
ACCESSION NUMBER: 2004:220935 USPATFULL Full-text
TITLE: Method and composition for treating hypopigmentation of the hair and skin
INVENTOR(S): VanStockum, Audrey, Chicago, IL, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2004170702	A1	20040902
APPLICATION INFO.:	US 2004-782827	A1	20040223 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2003-449866P	20030227 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: KRAMER & AMADO, P.C., 2001 JEFFERSON DAVIS HWY, SUITE 1101, ARLINGTON, VA, 22202
NUMBER OF CLAIMS: 22
EXEMPLARY CLAIM: 1
LINE COUNT: 593
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
SUMM . . . the present dietary supplement can reverse the loss of pigmentation in the skin and hair, resulting from such conditions as vitiligo. Thus, at least for some individuals, the natural skin

or hair color can be restored, and maintained, naturally without the. . .

SUMM . . . as the fingernails and toenails. Medical disorders which cause a loss of these melanocytes can result in diseases, such as vitiligo, marked by a loss of skin pigmentation.

SUMM [0004] Vitiligo affects 1%-2% of the world population, and results from a lack of melanin in the epidermis due to the disappearance. . . and shapes, either localized or generalized. Frequently, these white areas have a symmetrical distribution on both halves of the body. Vitiligo can begin at any age and become gradually progressive to the point of affecting the entire skin. Although the precise cause of vitiligo is not known, such clinical behavior speaks in favor on an internal or systemic etiology. It is possible that vitiligo is an autoimmune condition. Studies have reported that patients with vitiligo exhibit a circulating autoantibody that binds to melanocytes in human skin, nevus cells and melanoma cells.

SUMM . . . of the face are truly disfiguring. Years ago Nehru recognized this fact by ranking the need for a treatment of vitiligo on a level with that for leprosy and tuberculosis. In all instances there is a quest for help. At present. . .

SUMM . . . PCAT inhibits the progression of pigment loss, and reduces skin levels of peroxides which are known to be increased in vitiligo patients. However, there are certain drawbacks to PCAT. First, the cream can cause skin to break out in pimples and. . .

SUMM [0007] Novitil, which works as a tanning accelerator, has also been tried as a vitiligo treatment. This is a formulated gel containing oils, distilled water, glycerin, carboxmethylcellulose, camphor, menthol, polypeptides, Aloe Barbadensis, oligoelements and kathon. . .

SUMM . . . product which also contains natural anti-inflammatory agents, skin conditioners, and antioxidants. V-Tar has been used successfully in many patients with vitiligo and other hypopigmentary disorders. It will not stain the skin, and its once weekly application is convenient for many patients.. . .

SUMM . . . been approved by the FDA for eczema, the FDA does not support the clinical investigation or use of Protopic for vitiligo at this time.

SUMM [0012] In particularly severe cases of vitiligo, where the patches of white skin cover large parts of the body surface, depigmentation is sometimes used. In this therapy,. . .

SUMM . . . therapies using vitamins and/or minerals known in the art to be safe have been proposed. One such nutritional therapy for vitiligo was described by Montes (U.S. Pat. No. 4,985,443). This therapy involves oral treatment with folic acid, alone or in combination with vitamins C and B12. A second repigmentation therapy, disclosed as useful for treatment of grey hair, but not vitiligo, was proposed by Nelson (U.S. Pat. No. 6,149,933). This treatment regimen involves administration of copper, p-aminobenzoic acid, pantothenic acid, and. . .

SUMM [0016] The Nelson and Montes treatments have achieved some good yet inconsistent results. One area their treatments overlook is vitamin and mineral absorption. Some of. . .

SUMM [0017] There is thus a long-felt need in the art for therapies for treatment of vitiligo which are not prone to the frequently severe side effects of the treatments described above, and which do not require. . . the present invention a combination of vitamins and minerals stimulates pigmentation in the skin and hair. Advantages over prior art vitiligo treatments include a lack of dermatological side effects, including allergies, sunburn, scarring, and cancer, as well as a lack of. . .

DETD [0032] Vitamin B12 deficiency can also affect vitiligo patients. First, folic acid and vitamin B12 require each other's presence in biological reactions. Reactions are accelerated by supplying the. . . and vice versa. Hence, taking them together is recommended. Also, one of the theories relating to loss of melanocytes in vitiligo involves nervous system disorders, resulting in an anomalous distribution of neuropeptides in vitiliginous skin. Vitamin B12 deficiency can result in. . . myelin, a key protein in the glial cells that insulate nerve cells. Thus, vitamin B12 can potentially aid in healing vitiligo by helping to repair defective nerve cells.

DETD . . . acid, zinc, and Betaine HCl into a makeup or suntan formulation for application to the skin of a patient with vitiligo.

DETD . . . ingredients, such as products like lipstick or eyeshadow, may be used to color depigmented skin. A lipstick formulation for treating vitiligo might include, along with the active ingredients, such ingredients as assorted oils and waxes, such as sunflower oil, castor oil,. . .

CLM What is claimed is:

. . . method of claim 1, wherein said disorders marked by a loss of pigmentation are selected from the group consisting of vitiligo and gray hair.

L7 ANSWER 3 OF 4 USPATFULL on STN

ACCESSION NUMBER:	2002:221805 USPATFULL Full-text
TITLE:	Novel compositions of cobalamin and related corrinoids, and uses thereof
INVENTOR(S):	Sarill, William J., Arlington, MA, UNITED STATES Brennan, Thomas F., Nyack, NY, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002119947	A1	20020829
APPLICATION INFO.:	US 2001-928904	A1	20010813 (9)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 1997-936781, filed on 17 Sep 1997, GRANTED, Pat. No. US 6274564		

	NUMBER	DATE
PRIORITY INFORMATION:	US 1996-25298P	19960918 (60)
	US 1997-41750P	19970328 (60)

DOCUMENT TYPE:	Utility
FILE SEGMENT:	APPLICATION
LEGAL REPRESENTATIVE:	LAHIVE & COCKFIELD, 28 STATE STREET, BOSTON, MA, 02109
NUMBER OF CLAIMS:	19
EXEMPLARY CLAIM:	1
LINE COUNT:	1912

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

SUMM . . . gastric fundus, with consequent depletion or impairment of intrinsic factor. Suggestively, an increased prevalence of other autoimmune disorders, such as vitiligo, Graves' disease, Hashimoto's thyroiditis, Type I diabetes, Sjogren's syndrome and rheumatoid arthritis, is found among pernicious anemia patients; the resulting. . . Both psoriasis and lupus erythematosus have been successfully treated with cyanocobalamin (Stingily, Miss. Doctor 3, 222-223 (1955)), while cases of vitiligo have responded to treatment with vitamin B12 combined with other vitamins (Montes et al., Cutis 50, 39-42 (1992)).

SUMM . . . 173-182 (1992)), multiple sclerosis (Reynolds et al., Arch. Neurol. 48, 808-811 (1991); Kira et al., Intern. Med. 33, 82-86 (1994)), vitiligo (Montes et al., Cutis 50, 39-42 (1992)), psoriasis (Stingily, Miss. Doctor 32, 222-223 (1955)) and lupus erythematosus (Molad et al., Am.. . .

SUMM . . . other vitamins and nutrients to treat atherosclerotic conditions (Olszewski et al., Atherosclerosis 75, 1-6 (1989); Olszewski, ibid. 88, 97-98 (1991)), vitiligo (Montes et al., Cutis 50, 39-42 (1992)) and Down's syndrome (Harrell et al., Proc. Natl. Acad. Sci. USA 78, 574-578 (1981)).. . .

L7 ANSWER 4 OF 4 USPATFULL on STN

ACCESSION NUMBER:	2001:131279 USPATFULL Full-text
TITLE:	Compositions of cobalamin and related corrinoids, and uses thereof
INVENTOR(S):	Sarill, William J., 78 Hibbert St., Arlington, MA, United States 02154 Brennan, Thomas F., 44 A Gail Dr., Nyack, NY, United States 10960

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 6274564	B1	20010814	
APPLICATION INFO.:	US 1997-936781		19970917	(8)

	NUMBER	DATE
PRIORITY INFORMATION:	US 1996-25298P	19960918 (60)
	US 1997-41750P	19970328 (60)

DOCUMENT TYPE:	Utility
FILE SEGMENT:	GRANTED
PRIMARY EXAMINER:	Travers, Russell
LEGAL REPRESENTATIVE:	Lahive & Cockfield, LLP
NUMBER OF CLAIMS:	17
EXEMPLARY CLAIM:	1
LINE COUNT:	1907

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

SUMM . . . gastric fundus, with consequent depletion or impairment of intrinsic factor. Suggestively, an increased prevalence of other autoimmune disorders, such as vitiligo, Graves' disease, Hashimoto's thyroiditis, Type I diabetes, Sjogren's syndrome and rheumatoid arthritis, is found among pernicious anemia patients; the resulting. . . Both psoriasis and lupus erythematosus have been successfully treated with cyanocobalamin (Stingily, Miss. Doctor 32, 222-223 (1955)), while cases of vitiligo have responded to treatment with vitamin B12 combined with other vitamins (Montes et al., Cutis 50, 39-42 (1992)).

SUMM . . . 173-182 (1992)), multiple sclerosis (Reynolds et al., Arch. Neurol. 48, 808-811 (1991); Kira et al., Intern. Med. 33, 82-86 (1994)), vitiligo (Montes et al., Cutis 50, 39-42 (1992)), psoriasis (Stingily, Miss. Doctor 32, 222-223 (1955)) and lupus erythematosus (Molad et al., Am.. . .

SUMM . . . other vitamins and nutrients to treat atherosclerotic conditions (Olszewski et al., Atherosclerosis 75, 1-6 (1989); Olszewski, ibid. 88, 97-98 (1991)), vitiligo (Montes et al., Cutis 50, 39-42 (1992)) and Down's syndrome (Harrell et al., Proc. Natl. Acad. Sci. USA 78, 574-578 (1981)).. . .

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(FILE 'HOME' ENTERED AT 09:14:54 ON 23 FEB 2007)

FILE 'HCAPLUS, USPATFULL, BIOSIS, MEDLINE' ENTERED AT 09:15:13 ON 23 FEB 2007

L1	0	SEA VANSTOCKUM
L2	8691	SEA VITILIGO
L3	18	SEA L2 AND FOLIC AND VITAMIN C AND COPPER AND (B12 OR COBALAMIN)
L4	17	DUP REM L3 (1 DUPLICATE REMOVED)
L5	11	SEA L4 AND ZINC
L6	5	SEA L5 AND PANTOTHENIC D L6 1-5 IBIB KWIC D L5 1-11 IBIB KWIC
L7	4	SEA MONTES AND VITILIGO D L7 1-4 IBIB KWIC

FILE HOME

FILE HCAPLUS

FILE COVERS 1907 - 23 Feb 2007 VOL 146 ISS 9
FILE LAST UPDATED: 21 Feb 2007 (20070221/ED)

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FILE USPATFULL
FILE COVERS 1971 TO PATENT PUBLICATION DATE: 22 Feb 2007 (20070222/PD)
FILE LAST UPDATED: 22 Feb 2007 (20070222/ED)
HIGHEST GRANTED PATENT NUMBER: US7181769
HIGHEST APPLICATION PUBLICATION NUMBER: US2007044192
CA INDEXING IS CURRENT THROUGH 22 Feb 2007 (20070222/UPCA)
ISSUE CLASS FIELDS (/INCL) CURRENT THROUGH: 22 Feb 2007 (20070222/PD)
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Aug 2006
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Aug 2006

FILE BIOSIS
FILE COVERS 1969 TO DATE.
CAS REGISTRY NUMBERS AND CHEMICAL NAMES (CNs) PRESENT FROM JANUARY 1969 TO DATE.

RECORDS LAST ADDED: 22 February 2007 (20070222/ED)

FILE MEDLINE
FILE LAST UPDATED: 22 Feb 2007 (20070222/UP). FILE COVERS 1950 TO DATE.

All regular MEDLINE updates from November 15 to December 16 have been added to MEDLINE, along with 2007 Medical Subject Headings (MeSH(R)) and 2007 tree numbers.

The annual reload will be available in early 2007.

This file contains CAS Registry Numbers for easy and accurate substance identification.

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